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FIRST DIVISION OF THE

Paul & Pacific Railroad Company

LAND DEPARTMENT.

FARMS AND HOMES IN MINNESOTA.

This Company now offers for sale over

THREE HUNDRED THOUSAND ACRES

of the best PRAIRIE, MEADOW, and TIMBER Farming Lands in the West, in lots of 40, 80, or 160 acres, at low prices, for cash, for the Real Estate Bonds of the Company at par, or on long credit at seven per cent. interest

To Colonists, either American or Foreign, choice localities are offered, every way suitable.

MINNESOTA IS THE BEST WHEAT STATE IN THE UNION.

The Branch Line of this Company is now completed to Saint Cloud. The Lands granted by Act of Congress, approved March 3, 1857, amounting to six sections per mile, have been certified to the State, and by the State deeded to the Company.

The Company now offer for sale to actual settlers, over THREE HUNDRED THOUSAND ACRES OF LAND.

These lands lie in the Valley and on either side of the Upper Mississippi River; they are adjacent to the line of completed Railroad. Among them are some of the best Timber, Meadow, and Prairie lands in the country.

They are located in Anoka, Sherburne, Benton, Stearns and Wright Counties.

Ten years ago Minnesota imported her breadstuffs; in 1866 her production of wheat is estimated at Sixteen Millions Bushels, and her other products of Corn, Rye, Oats, Potatoes, Wool and Lumber, enter largely into the commerce of the country.

The climate is healthy, the soil fertile, and the lands the cheapest now offered for sale in the West.

These lands have been reserved from sale since 1857; they are in the midst of considerable settlements, and convenient to churches, schools and established roads and markets.

TO PERSONS OF SMALL MEANS, who desire to make a home for themselves and their children in a healthy and productive region; to STOCK RAISERS AND WOOL GROWERS, inducements are now offered by this Company never before held out in the United States.

The Company also Offer to Actual Settlers Only,

their lands on the main line, near their line of road from Saint Paul, *via* Saint Anthony, Minneapolis, Minnetonka Lake, Crow River, to Big Stone Lake, on the Western boundary of the State.

These lands are considered as the most valuable in the State, and are located in the counties of *Hennepin, Carver, Wright, McLeod, Meeker, Kandiyohi* and *Monongalia*.

For further particulars apply to

GEO. L. BECKER, President,

SAINT PAUL, MINN.

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THE OLDEST AND BEST NEWSPAPER IN THE STATE.

A DEMOCRATIC DAILY, TRI-WEEKLY, & WEEKLY JOURNAL.

As an advertising medium the *Saint Paul Pioneer* is unsurpassed by any paper in the Northwest.

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Especial Attention paid to Statistics of the Development and Growth of the State.

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"THE WEEKLY PRESS" is the LARGEST PAPER published west of Chicago.

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The only Commercial Paper in the State.

TERMS---ONE DOLLAR PER YEAR, IN ADVANCE.

1867. THE NORTHERN LINE. 1867.

This well known Steamboat Company continue their line of Daily Packets from ST. LOUIS TO ST. PAUL, through the season of navigation.

Their Line embraces, among others, Nine First-Class Side-Wheel Steamers, commanded by careful and experienced officers, and thoroughly fitted up for the accommodation of passengers. A Boat leaves St. Paul and St. Louis each day, touching at the cities and towns along the Mississippi River in Missouri, Illinois, Iowa, Wisconsin and Minnesota. The picturesque and romantic scenery along this route make it delightful and satisfactory to the tourist and pleasure seeker.

MINNESOTA:

ITS ADVANTAGES TO SETTLERS.

BEING A BRIEF SYNOPSIS OF

ITS HISTORY AND PROGRESS, CLIMATE, SOIL, AGRICULTURAL AND MANUFACTURING FACILITIES, COMMERCIAL CAPACITIES, AND SOCIAL STATUS;

ITS LAKES, RIVERS AND RAILROADS;

HOMESTEAD AND EXEMPTION LAWS;

EMBRACING A CONCISE TREATISE ON ITS

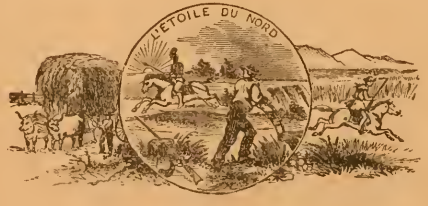
CLIMATOLOGY, IN A HYGIENIC AND SANITARY POINT OF VIEW;

ITS UNPARALLELED SALUBRITY, GROWTH AND PRODUCTIVENESS,

AS COMPARED WITH THE OLDER STATES;

AND THE

ELEMENTS OF ITS FUTURE GREATNESS AND PROSPERITY.



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GIRART HEWITT, ST. PAUL, MINNESOTA.

1867.

Governor Marshall's Message to the Minnesota Legislature, January 10, 1867, contains the following:

Total Permanent School Fund of Minnesota,	$1,333,161.60
Official Report from Surveyors of Logs and Lumber scaled in 1866,	157,273,944
Estimated value of same,	$2,359,124.00
Export of Wheat from the State in 1866,	9,267,153
Taxable value of property,	$57,500,000.00
Population of the State,	340,000
Number of miles of Railroad now in operation in the State,	315
Estimated number end of this year,	530

In addition to the United States Land Grants to our Railroads and Schools, Gov. Marshall says the Secretary of the Interior has recently ordered the selection of 500,000 acres for internal improvements in this State, under a half forgotten act of Congress.

The Message also shows that the State debt of $250,000 is nearly paid from the proceeds of the Sinking Fund, and by next July all but fifty thousand dollars will be paid with funds already provided for.

Official Statistics of Minnesota Land Offices published in St. Paul Press, January 13th, 1867:

Acres sold at Land Offices,	731,634
Acres taken under Homestead Law in four years,	1,851,627
Acres entered since 1847,	10,216,723

Congress has granted to the State three million acres for the support of Schools, and seven and a half million acres for the construction of Railroads in Minnesota!

The Railroad Lines and Packet Companies Cards, at the end of this pamphlet, show those coming to the State how they can reach different points. The "Minnesota Stage Co." owned by J. C. Burbank & Co., connect at the end of each Railroad, and traverse the entire State. The "American Express Co." and Telegraph wires are found on every line.

HEWITT'S

REAL ESTATE OFFICE,

SAINT PAUL, - MINNESOTA.

(Established in 1856.)

Sells Farms, Farm Lands, Dwellings, and Business Property. Makes Investments, Loans and Collects Money, Examines Titles, Pays Taxes, &c. &c.

(Correspondent for Capitalists.)

GIRART HEWITT,

Attorney at Law.

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MINNESOTA:

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BEING A BRIEF SYNOPSIS OF

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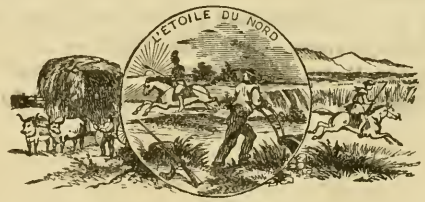

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GIRART HEWITT, ST. PAUL, MINNESOTA.

1867.

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STATEMENT.

In the preparation of this pamphlet care has been taken to faithfully and impartially represent the *whole State*, and to avoid exaggerations; believing that Minnesota needs but a plain statement of facts with which to go before the world for her full share of those seeking homes in the Great West.

It is offered for *gratuitous circulation*, in order that persons here and elswhere, knowing our healthy climate and prolific soil, may let their friends and others seeking new homes, know of Minnesota, before they incur the fearful risk of plunging themselves and families into the fever-ridden districts of other States.

I am indebted to DR. THADDEUS WILLIAMS, of St. Paul, for the thorough and reliable treatise on "The Climate of Minnesota, as a Resort for Invalids," and other assistance.

Coming to Minnesota over ten years ago an invalid, myself a beneficiary of its healthy climate, and seeing thousands of like cases, I have felt it a duty and a pleasure to make this effort to let others know what manner of State we have.

GIRART HEWITT.

St. Paul, Minnesota, January 10th, 1867.

NOTICE.

☞ This pamphlet is published for *general gratuitous circulation.* The object being to invite attention to our great State, and make Minnesota known everywhere. For that purpose it is deposited with GIRART HEWITT, ST. PAUL, MINNESOTA, who will mail it to any names sent him, and cheerfully answer letters of inquiry as to this State.

Entered according to Act of Congress, in the year 1867, by GIRART HEWITT, in the Clerk's Office of the District Court of the United States for the District of Minnesota.

Press Printing Company, Book and Job Printers and Bookbinders, St. Paul.

MINNESOTA:

ITS ADVANTAGES TO SETTLERS.

GEOGRAPHICAL.

The State of Minnesota is one of the youngest in the united sisterhood of States. It was admitted into the Union in May, 1858, being the thirty-second State admitted into the Union. It derives its name from two Indian words, "*Minne*" and "*Sotah*," "sky-tinted water," in reference to its numerous and beautiful streams and lakes which from their crystal purity reflect the clear, steel-blue skies. The State lies between 43° 30′ and 49° north latitude, and 91° and 97° 5′ west longitude. It is bounded on the north by the British Possessions; on the south by the State of Iowa; east by Wisconsin and Lake Superior, and west by Dakota Territory. Its estimated area is 84,000 square miles, or about 54,000,000 acres, thus making it one of the largest States in the Union, being nearly equal to the combined areas of the large and populous States of Ohio and Pennsylvania, and embracing a larger extent of territory than the whole of New England, capable of eventually sustaining a population equal to that of England.

Advantageous Geographical Position.—The geographical position of Minnesota is the most favored on the continent. Its location is central between the Atlantic and Pacific Oceans, Hudson's Bay on the north, and the Gulf of Mexico on the south. It is also midway between the arable limitsof the continent, where the products of agriculture attain their most perfect development. Generally speaking, the valleys of the Mississippi, St. Lawrence and Red River may be said to rise in the form of a huge convex mass, which culminates in the sand dunes or drift hills in the northern part of Minnesota, where those three great rivers take their rise and flow north, south and northeast. Minnesota is thus the actual summit of the continent, and the pinnacle of the watershed of North America. In reference to this fact, the Hon. Wm. H. Seward, in a speech delivered at St. Paul in 1860, says, "Here spring up almost side by side, so that they may kiss each other, the two great rivers of the continent," the Mississippi and the St. Lawrence, rising almost within a stone's throw of each other, and running in opposite directions,—the one half way to Europe, the other bearing our commerce to the Gulf of Mexico, gathering the products of the cotton plantations of the South and bringing them to the vast water powers of the Upper Mississippi.

The arable area of the vast territory northwest of us—bounded on the north by the line of arctic temperature, and south by the arid sandy plains—is projected through the valley of the Saskatchewan to the Pacific border; "grimly guarded by the Itasca summit of the Mississippi, 1680 feet high on the east, and the Missouri coteau, 2000 feet high," it forms "the only avenue of commercial communication between the east and west coasts, the only possible route of a Pacific railway, and the only theater now remaining for the formation of new settlements." Lying exactly across the commercial isthmus thus hemmed in, and which is the only outlet of this vast region to the Eastern and Southern States, Minnesota is the gateway between the eastern and western sides of the continent. "Through this one pass," says Mr. Wheelock, "between the con-

tinental deserts of sand and ice, must flow the great exodus now dashing itself in vain against their shores, as the tribes of Asia flowed into Europe through the passes of the Caucasus. Every advancing wave of population lifts higher and higher this gathering flood of American life, which, the moment that it begins to press upon the means of subsistence, must pour all its vast tide through this narrow channel into the inland basins of the Northwest—till the Atlantic and Pacific are united in a living chain of populous States."

This commanding physical position of Minnesota gives it the key and control of the outlet of the great mass of the commerce of the immense and productive regions of the western and northwestern portions of the continent—regions as yet almost a wilderness, but whose incalculably large exports and imports, following the inexorable laws of commerce, must find their highway through our State, when at no distant day those large and fertile districts north and west of us swarm with the industry of empires, and pour their wealth into our coffers, giving us a significance second to none in the world. Not only that, but, instead of passing by us and going two thousand miles east to trade, the workshops and factories which even now are opening up so rapidly on our water-powers will supply them and enrich us ; thus making this vast region tributary to us as surely as the West ever has heretofore been tributary to the East. Noticing this fact, in the speech already alluded to, Mr. Seward says, "Here is the place, the central place, where the agriculture of the richest region of North America must pour out its tributes to the whole world. On the east, all along the shore of Lake Superior, and west, stretching in one broad plain, in a belt quite across the continent, is a country where State after State is yet to arise, and where the productions for the support of human society in the old, crowded States must be brought forth." Then follows the remarkable and far-seeing views of this great statesman and politician, that Minnesota is yet to exercise a powerful influence in the political destinies of this continent. "Power is not to reside permanently on the eastern slope of the Aleghany mountains, nor in the seaports. Seaports have always been overrun and controlled by the people of the interior, and the power that shall communicate and express the will of men on this continent is to be located in the Mississippi Valley, and at the *sources* of the Mississippi and St. Lawrence." Mr. Seward only expresses the fact, taught by the whole past history of the whole world, that empire travels westward, when he asserts, "I now believe that the ultimate, last seat of government on this great continent will be found somewhere within a circle or radius not very far from the spot on which I stand, at the head of navigation on the Mississippi River."

The future destiny of Minnesota therefore is to be a glorious one, and fortunate the descendants of those who may now obtain an interest and foothold within her borders. We will proceed to speak more specially of the true elements of this future greatness and prosperity, as already indicated by the unerring logic of facts and unparalleled growth.

HISTORICAL OUTLINE.

Minnesota is what was once the "land of the Dakotas," who inhabited it long before their existence was known to white men. Their chief council chamber was in Carver's Cave, near where the present capital of the State now stands.

The honor of discovering Minnesota is divided between Louis Hennepin, a Franciscan priest, and DuLuth, a French explorer. Hennepin was sent out in the spring of 1680 to explore the Upper Mississippi in company with two traders ; he was captured by the Indians and carried to the present site of St. Paul. On his return in June, he met DuLuth and a party of explorers. He claims to have discovered the Falls of the Mississippi, and bestowed upon them the name of St. Anthony in honor of his patron saint.

In 1689, Perrot, accompanied by LeSueur and others, took formal possession of the country embracing Minnesota, in the name of France, and established a fort on the west shore of Lake Pepin. Although discovered upwards of two hundred years ago, the settlement of Minnesota did not commence until about twenty years ago, with the exception of a few scattering pioneer hunters, traders

and missionaries, who took up their abode in it at a much earlier date. During the lapse of two centuries the vast northwest, embracing the best lands and climate on the continent, remained a wilderness, while the Atlantic and Western States were being settled. Very vague and erroneous notions prevailed in regard to this region, which was popularly supposed to be too cold and inhospitable for agricultural pursuits. But this region reproduces the west and north of Europe, containing the most powerful and enlightened nations on the globe, with the exceptions caused by vertical configuration only, and gives an immense and yet unmeasured capacity for occupation and expansion, containing an area above the forty-third parallel, perfectly adapted to the fullest occupation by cultivated nations, not inferior to the whole of the United States east of the Mississippi.

This region, extending to the Pacific, and of which Minnesota is the "garden spot," is yet destined to supersede in wealth and agricultural and manufacturing importance the older part of the United States, lying on the Atlantic coast and east of the Mississippi, and to become the seat of empire on the American continent.

"The parallel in regard to the advancement of American States here may be drawn with the period of the earliest trans-Alpine Roman expansion, when Gaul, Scandinavia, and Britain were regarded as inhospitable regions, fit only for barbarian occupation. The enlightened nations then occupied the latitudes near the Mediterranean, and the richer northern and western countries were unopened and unknown."*

In the year 1695, the second post in Minnesota was established by LeSueur; and in October, 1700, he explored the Minnesota and Blue Earth rivers and established another post on the latter. From this period up to 1746, the history of Minnesota is nothing more than the history of the adventures of LeSueur and the traders among the Indians, and the wars of the latter among themselves, and is full of wild and romantic incidents. At this time France and England were involved in a war which extended to their colonies in the New World, and the French enlisted many savages of the Upper Mississippi on their side.

On the 8th of September, 1760, the French delivered up their posts in Canada to the English. By a treaty made at Versailles in 1763, France ceded the territory comprised within the limits of Minnesota and Wisconsin to England. But for a long time the English got no foothold in their newly acquired territory, owing to the greater popularity of the French, many of whom had married Indian wives. But little was known of the country previous to 1766, when Jonathan Carver of Connecticut explored it, and afterwards went to England and wrote a book of his adventures. Even at this early day, though over a thousand miles intervened between the Falls of St. Anthony and any white settlement, the explorer was impressed with the beauty and fertility of the country, and spoke of the commercial facilities its future inhabitants would enjoy *via* the Mississippi and the northern chain of lakes. Carver's Cave at St. Paul, in which several bands of Indians held an annual grand council—making it the capital of the State a hundred years ago—was named after him.

After the peace between the United States and England in 1783, England ceded her claim to the territory south of the British Possessions to the United States. December 20, 1803, the province of Louisiana, embracing that portion of Minnesota west of the Mississippi, was ceded to the United States by France, who on the first of the same month had received it from Spain; the latter objected to the transfer, but withdrew her opposition in 1804. In 1805, Gen. Zebulon M. Pike explored this region of country, and his reports, and those of Long, Fremont, Pope, Marcy, Stansberry, and other military officers exerted a large influence in first attracting attention to Minnesota as a field for settlement. He obtained a grant of land from the Sioux Indians on which Fort Snelling, five miles above St. Paul, was built in 1820.

The English traders still lingered in Minnesota after its cession to the United States, and incited by them against the Americans, the Indians became trouble-

* "Blodget's Climatology of the United States," page 529.

some, and during the war of 1812 generally took sides with the English. After the peace of 1815 they acknowledged the authority of the United States, but the Ojibways and Dakotas (or Siouxs) being hereditary enemies continued to war among themselves. In 1812 a small settlement was formed in the Red River country, composed principally of Scotchmen, under the auspices of Lord Selkirk. They were greatly persecuted by the Hudson Bay Company, who claimed the sole right of hunting and trading for furs in the northwest. In 1821, "after years of bloodshed, heart-burnings, fruitless litigation, and vast expense, the strife was concluded by a compromise between the two companies." In 1822, the first mill in Minnesota was erected where Minneapolis now stands. In 1823, the first steamboat that ever ascended the Mississippi above Rock Island, arrived at Fort Snelling to the great astonishment of the natives.

In 1820, Missouri was admitted into the Union as a State, leaving the territory north of it, including Iowa and all of Minnesota west of the river, without any organized government. In 1834, it was attached to Michigan for judicial purposes. In 1836, Nicollet arrived in Minnesota and spent some time in exploring the sources of the Mississippi.

In 1837, the pine forests of the valley of the St. Croix and its tributaries were ceded to the United States by the Ojibways ; and the same year the Dakotas ceded all their lands east of the Mississippi. These treaties were ratified June 15, 1838.

One of the earliest settlers in St. Paul, the present capital of the State, was named Phalon. Other families from the Red River settlement settling there, Father Gaultier, a Romish missionary, built a log chapel, "blessed the new *basilica*," and dedicated it to St. Paul, which thus came to be the name of the city, which previous to that time had been called "Pig's eye." In 1848, St. Paul was a small settlement, and contained only 840 inhabitants in 1849 ; in 1855 it had four or five thousand ; 10,600 in 1860, and about 14,000 in 1865, and 16,000 in 1866.

In 1843, the settlement of Stillwater, on the St. Croix, 18 miles from St. Paul, was commenced.

Territorial Organization.—On the 3d of March, 1849, the Territory of Minnesota was organized, its boundaries including the present Territory of Dakota, and St. Paul designated as the capital. April 28th the first newspaper was issued in the new capital. Alexander Ramsey was appointed Governor, and arrived with his family the latter part of May. On the first of June he proclaimed the Territorial government organized. The Territory contained 4,680 inhabitants at this time.

After the organization of the Territory, immigration flowed in rapidly, and both St. Paul and country were settled very fast. On the 1st of August, 1849, the first delegate was elected to Congress, and the 3d of September the first Legislative Assembly met and created nine counties. In 1850, small steamboats commenced to run on the Minnesota river.

In 1851, an important treaty was effected with the Dakotas, by which their title to the west side of the Mississippi and the valley of the Minnesota river was extinguished, and this vast tract open to settlement. At a very early day Minnesota took the subject of common schools in hand, and the first report of a Superintendent of Public Instruction was presented to the third Legislative Assembly, which met in January, 1852.

From this time forward immigration flowed into Minnesota at high tide, and the State filled up with unprecedented rapidity. Villages and towns sprang up as if by magic. Land speculation ran high, and during the period of the greatest inflation of prices, the financial crash of 1857 fell like a thunderbolt. Great distress and stagnation of business was the direct result, and for a year or two the rapid growth of the State was arrested. But the remoter consequences of the crash were permanently beneficial to the State. Towns had sprung up like mushrooms without sufficient tributary agricultural districts to support them. Rent and living were ruinously high. After the crash, the speculator's occupation was gone ; the energies of the inhabitants were directed to manufactures

and agriculture—the basis of all true State or National prosperity. Previous to that era, breadstuffs had been *imported;* in 1854 the number of plowed acres in the State was only 15,000 ; in 1860, there were 433,276, and in 1866 fully one million acres. Minnesota was suddenly developed as one of the finest grain growing States in the Union, and in 1865 exported upwards of eight million bushels of wheat, and in 1866, over ten million bushels.

Admitted into the Union.—The State Constitution was framed by a convention elected for that purpose, which assembled at St. Paul in July, 1857, and it was voted upon and adopted the ensuing October. The State was admitted into the Union in May, 1858, and the State government organized. In 1861, when the rebellion broke out, our State promptly responded to all the calls made on her for men and money, though at a greater detriment to her growth and prosperity, perhaps, than that of any other State. Being a new State, she had no surplus population, and her quotas were taken from her grain fields, workshops and pineries. With a population of about 175,000 at the beginning of the war, she furnished about 24,000 men to the Union armies. Few States have such a record.

The Indian Massacre.—In August, 1862, one of the most fiendish and widespread massacres recorded in American history took place upon the western frontier of Minnesota by the Dakota or Sioux Indians. A large military force was at once sent out, which soon laid waste the whole Indian country belonging to these tribes, killed "Little Crow," their leader, and utterly routed and subdued their braves. A large number were captured ; some of them tried and condemned and sentenced to death—of these thirty-eight were hung, and the others with their entire tribes, were, under the order of the General Government, sent clean out of the country to a Reservation beyond the Missouri river.

Remarkable Progress of the State.—It will thus be seen that Minnesota has had extraordinary obstacles to overcome. The financial panic of 1857, the rebellion of 1861, and Indian war of 1862, have undoubtedly greatly retarded her growth ; yet, notwithstanding those drawbacks, she has grown more rapidly than any State in the Union. Her percentage of increase from 1860 to 1865 was 45½ per cent., while that of Wisconsin was only 12, Illinois 27, Iowa 11, Michigan 7½. All danger from Indians has long since vanished ; perfect security reigns, and homes in the most remote parts of the State are as secure as those of New-England. In 1865 the population of the State was 250,000, an increase of 78,000 since 1860 ; the increase during the past year, 1866, is estimated at about 60,000.

Government.—The State government is very similar to that of the other Western States. The constitution secures civil and religious rights to all ; immigrants of proper age are allowed to vote after a residence of four months, and foreigners secure very liberal terms of citizenship.

The present State Officers are as follows :—William R. Marshall, Governor; Thomas H. Armstrong, Lieutenant Governor ; Henry C. Rogers, Secretary of State ; Chas. McIlrath, Auditor ; Chas. Scheffer, Treasurer ; Wm. Colville, Attorney General.

EXEMPTION LAWS OF MINNESOTA.

Humane and Just Provisions.—Too much credit cannot be accorded the men of our Legislature for the wise and liberal provisions of our State Homestead and Exemption Law. When we recall for a moment the statutes of the older States in that barbarous age when an Exemption Law "of one hundred dollars" and "imprisonment for debt" disgraced their law-books, and contemplate the succession of revulsions that we have seen sweeping over the land, prostrating the business and business men, the energetic, progressive, live men of our country almost in a night, themselves, and those dependent on them, involved in one common ruin, say whether I too much honor those men whose legislation comes up to the spirit of the age in which we live, who have placed upon the statutes of Minnesota a Homestead and Exemption Law *more liberal than that of any other State!*

I quote from the statutes of 1866, page 498 :

'That a homestead consisting of any quantity of land not exceeding eighty acres and the dwelling house thereon and its appurtenances, to be selected by the owner thereof, and not included in any incorporated town, city or village, or instead thereof, at the option of the owner, a quantity of land not exceeding in amount one lot, being within an incorporated town, city or village, and the dwelling house thereon and its appurtenances, owned and occupied by any resident of this State, shall not be subject to attachment, levy or sale, upon any execution or any other process issuing out of any court within this State."

Thus it will be seen that we have no limitation as to the value of the farm or residence thus secured to the family. It may be worth one thousand or ten thousand dollars. Whatever it is, it remains the shelter, the castle, the *home* of the family, to cluster around its hearthstone in the hour of gloom and disaster, as securely as they were wont to do in the sunshine of prosperity.

While there may be those who prefer an exemption by *value* rather than *area*, and urge that one so liberal as ours can be taken advantage of by knaves, it must be remembered that no general law can be framed for the protection of the helpless and unfortunate, that will not be sometimes taken advantage of by others. We think it may be safely asserted that an exemption law such as ours, is found a blessing to thousands of worthy men, women and children for every one unworthily shielded by its provisions.

Personal Property Exempted.—In addition to the *home*, there is also exempted a proportionately liberal amount of personal property, consisting of household furniture, library, horses, cattle, sheep, hogs, wagons, farming utensils, provisions, fuel, grain, &c., &c., and all the tools and instruments of any mechanic, and four hundred dollars' worth of stock in trade ; also the library and implements of any professional man. See State laws, page 489.

UNITED STATES HOMESTEAD LAW.

Large numbers are availing themselves of the liberal Homestead Law passed by Congress, and now in force. Minnesota possesses the only domain attractive to this class of settlers—having nearly forty million acres of public land yet open to entry and settlement. This law provides that each settler, in five years' occupation, becomes the owner of "160 acres by paying the sum of ten dollars and the fees of the land officer, provided he be a citizen of the United States or has declared his intention to become such;" and it further provides that "*no land acquired under the provisions* of this act shall in any event become liable to the satisfaction of any debts contracted prior to the issuance of the patent therefor." In view of the immense quantity of "broad acres" thus offered without cost, situated as they are all over this new State, in districts well watered and timbered, where the mails and express are now extended, and railroads and telegraphs rapidly pushing their way, it is not surprising that thousands are coming into Minnesota annually to secure good farms for themselves and their families—farms that will, in a few short years, be in the midst of cultivated neighborhoods, with churches and school-houses arising at every hand, amid all the surroundings of civilization and progress.

LAND OFFICES.

The land offices for the several land districts of Minnesota are located at the following places :—St. Peter, Nicollet County ; Greenleaf, Meeker County ; Winnebago City, Faribault County ; St. Cloud, Stearns County ; Taylor's Falls, Chisago County ; Duluth, St. Louis County.

DEMAND FOR LABOR IN THE WEST.

It is said a young man recently wrote Mr. Greeley of the "Tribune," to obtain a situation, and he replied that "New York is just entering upon the interesting process of starving out 200,000 people whom war and its consequences has driven hither. It is impossible to employ more until these are gone."

The journals of Eastern cities are annually filled with complaints that there is a surplus of laborers and operatives in the East seeking work ; that the com-

petition for employment is often such that workmen are willing to accept wages far below what is just to them and their families; that the offices of European Consuls are beset with foreigners who have exhausted their means seeking employment in the crowded Eastern cities. This does not and will not in a hundred years apply to the great West. Labor of all kinds, especially farm labor, must of necessity continue in demand here. Indeed one can scarcely imagine a condition of things in the West that will make it otherwise. Laborers and working men in almost every branch of industry are generally in scant supply and great demand throughout the West. Those lingering around the crowded seaports of the East with no hope beyond a mere subsistence, their families growing up in poverty and vice, having no chance with others in the world, should turn their attention to the great West, where a free homestead, rich lands, education for their children, and a healthy climate invites them. Our pineries alone, give employment to over 3,000 men, to say nothing of other branches of the lumber interest, and our numerous railroads now under construction.

PHYSICAL CHARACTERISTICS OF THE STATE.

Physical Districts.—The physical characteristics of a country exert an important influence on its inhabitants. "Grand scenery, leaping waters, and a bracing atmosphere,"—says Neill in his History of Minnesota,—"produce men of different cast from those who dwell where the land is on a dead level, and where the streams are all sluggards. We associate heroes like Tell and Bruce with the mountains of Switzerland and the highlands of Scotland." Although Minnesota is not a mountainous country by any means, its general elevation gives it all the advantages of one, without its objectionable features. Being equidistant from the Atlantic and Pacific oceans, situated on an elevated plateau, and with a system of lakes and rivers ample for an empire, it has a peculiar climate of its own, possessed by no other State.

The general surface of the greater part of the State is even and undulating, and pleasantly diversified with rolling prairies, vast belts of timber, oak openings, numerous lakes and streams, with their accompanying meadows, waterfalls, wooded ravines and lofty bluffs, which impart variety, grandeur and picturesque beauty to its scenery.

The State may be divided into three principal districts. In the northern and western part of the State an exception to its general evenness of surface occurs in an elevated district which may be termed the highlands of Minnesota. This district, resting on primary rocks, is of comparatively small extent—16,000 square miles—and covered with a dense growth of pine, fir, spruce, &c.; it has an elevation of about 450 feet above the general level of the country, and is covered with hills of diluvial sand and drift, from 85 to 100 feet in height, among which the three great rivers of the American Continent—the Mississippi, St. Lawrence, and Red River—take their rise. The temperature of this district is from 5 to 8 degrees lower than that of the rest of the State; although possessing some good land, its principle value consists in its immense forests and its rich mineral deposits of copper, iron and the precious metals.

The valley af the Red River forms another district larger than the highlands, containing 18,000 square miles, with a deep, black soil composed of alluvial mould, and rich in organic deposits. This district produces the heaviest crops of grain, especially wheat, of any section in the United States. It has a subsoil of clay, is but sparsely timbered, with but few rivers or lakes, and is not therefore so well drained as other parts of the State.

The Mississippi valley comprises the third district; it contains about 50,000 square miles, or about three-fifths of the whole State. It is the "garden spot" of the Northwest, and comprises one of the finest agricultural districts in the world. Its general characteristics are those of a rolling prairie region, resting on secondary rocks; it is unusually well drained, both by the nature of the soil, which is a warm, dark calcareous and sandy loam, and the innumerable lakes and streams which cover its surface with a perfect network. It is dotted by numerous and extensive groves and belts of timber. These main districts are also

subdivided into smaller ones by the valleys of the numerous streams which intersect them ; but space does not admit of a detailed description.

Rivers and Streams.—The Mississippi river, 2,400 miles long, which drains a larger region of country than any stream on the globe, with the exception of the Amazon, rises in Lake Itasca, in the northern part of Minnesota, and flows southeasterly through the State 797 miles, 134 of which forms its eastern boundary. It is navigable for large boats to St. Paul, and above the Falls of St. Anthony for smaller boats for about 150 miles farther. The season of navigation has opened as early as the 25th of March, but usually opens from the first to the middle of April, and closes between the middle of November and first of December. In 1865 and 1866, steamboat excursions took place on the first of December, from St. Paul, and the river remained open several days longer. The principal towns and cities on the Mississippi in Minnesota, are, from below upwards, Winona, Wabashaw, Lake City, Red Wing, Hastings, St. Paul, Minneapolis, St. Anthony, Anoka, Dayton, Monticello, St. Cloud, Sauk Rapids, Watab.

The Minnesota River, the source of which is among the Coteau des Prairies, in Dakota Territory, flows from Big Stone, on the western boundary of the State, a distance of nearly 500 miles, through the heart of the southwestern part of the State, and empties into the Mississippi at Fort Snelling, five miles above St. Paul. It is navigable as high up as the Yellow Medicine, 238 miles above its mouth, during good stages of water. Its principal places are Shakopee, Chaska, Carver, Belle Plaine, Henderson, LeSueur, Traverse des Sioux, St. Peter, Mankato and New Ulm.

The St. Croix River, rising in Wisconsin, near Lake Superior, forms about 130 miles of the eastern boundary of the State. It empties into the Mississippi nearly opposite Hastings, and is navigable to Taylor's Falls, about 50 miles. It penetrates the pineries and furnishes immense water power along its course. The principal places on it are Stillwater and Taylor's Falls.

The Red River rises in Lake Traverse, and flows northward, forming the western boundary of the State from Big Stone Lake to the British Possessions, a distance of 380 miles. It is navigable from Breckenridge, at the mouth of the Bois de Sioux River to Hudson's Bay ; the Saskatchewan, a tributary of the Red River, is also said to be a navigable stream, thus promising an active commercial trade from this vast region when it shall have become settled up, via the St. Paul and Pacific railroad, which connects the navigable waters of the Red River with those of the Mississippi.

Cannon River, dividing Dakota and Goodhue counties, it is said can be made a navigable stream by slack-water improvements, for which purpose a company with a capital of $50,000 has been formed.

Among the more important of the numerous small streams are Rum River, valuable for lumbering ; Vermilion River, furnishing extensive water power and possessing some of the finest cascades in the United States ; the Crow, Blue Earth, Root, Sauk, Le Sueur, Zumbro, Cottonwood, Long Prairie, Red Wood, Waraju, Pejuta Ziza, Mauja Wakan, Buffalo, Wild Rice, Plum, Sand Hill, Clear Water, Red Lake, Thief, Black, Red Cedar, and Des Moines rivers ; the St. Louis River, a large stream flowing into Lake Superior, navigable for twenty-one miles from its lake outlet, and furnishing a water-power at its falls said to be equal to that of the falls of the Mississippi at St. Anthony, and many others, besides all the innumerable hosts of first and secondary tributaries to all the larger streams. The sources of most of these streams being high, their descent is considerable, furnishing the finest system of water-powers of every grade in the world. Many of the brooks, with deep cut channels, are full of trout, leap and dance merrily over the prairies, often taking sudden leaps, forming beautiful and romantic cascades. One of these, on the outlet of Lake Minnetonka, has been immortalized by Longfellow in Hiawatha :

> "Here the Falls of Minne-ha-ha
> Flash and gleam among the oak trees,
> Laugh and leap into the valley."

Lakes.—Lake Superior, the largest body of fresh water on the globe, forms a

portion of the eastern boundary of Minnesota, giving it 167 miles of lake coast, with one of the best natural harbors and breakwaters, at Du Luth, Minnesota, to be found on any coast. When the Superior and Mississippi railroad is completed, connecting the commercial centre of the State with Lake Superior, a large lake commerce will spring into existence.

Besides, the whole surface of the State is literally begemmed with innumerable lakes, estimated by Schoolcraft at 10,000. They are of all sizes, from 500 yards in diameter to 10 miles. Their picturesque beauty and loveliness, with their pebbly bottoms, transparent waters, wooded shores and sylvan associations, must be seen to be fully appreciated. They all abound in fish, black and rock bass, pickerel, pike, perch, cat, sunfish, &c., of superior quality and flavor ; and in the spring and fall they are the haunts of innumerable duck, geese, and other wild fowl. In some places they are solitary, at others found in groups or chains. Many are without outlets, others give rise to meandering and meadow-bordered brooks. These lakes act as reservoirs for water, penetrating the soil and by their exhalations giving rise to summer showers during dry weather. Prof. Maury says of Minnesota, that although far from the sea, "it may be considered the best watered State in the Union, and it doubtless owes its abundance of summer rains measurably to this lake system."

Forests.—Among those unacquainted with the State, Minnesota is apt to be regarded as a prairie country, destitute of timber. On the contrary, there is no Western State better supplied with forests.

In the northern part of the State is an immense forest region estimated to cover upwards of 21,000 square miles, constituting one of the great sources of wealth and industry of the State. The prevailing wood of this region is pine, with a considerable proportion of ash, birch, maple, elm, poplar, &c. West of the Mississippi, lying between it and the Minnesota, and extending south of that stream, is the Big Woods, about 100 miles in length and 40 miles wide. This district is full of lakes, and broken by small openings. The prevailing woods are oak, maple, elm, ash, basswood, butternut, black walnut and hickory. Besides these two large forests, nearly all the streams are fringed with woodland, and dense forests of considerable extent cover the valleys. The extensive bottoms of the Mississippi, Minnesota and Blue Earth are covered with a heavy growth of white and black walnut, maple, boxwood, hickory, linden and cottonwood. The valleys of the Zumbro and Root rivers support large tracts of forests growth. They are found more or less in Wabashaw, Dodge, Steele, Fillmore, Mower, Freeborn and Olmsted and contiguous counties.

But the oak openings, distributed in groves and large parks through the uplands along the margins of the numerous streams, form a large resource of the prairie population for domestic and mechanical purposes. Towards the western boundary of the State the timber becomes more scanty, and it assumes more the character of a vast prairie region, dotted here and there with groves and belts of timber, fringing the Red River and the minor streams. The choice timbered lands and oak openings will be first selected by the settler, and the treeless prairies of the western frontier will be covered with timber in a few years, as soon as the annual scourge of the prairie fire is checked. Wherever these fires are arrested the land is soon covered by a dense growth of timber.

THE PINERIES AND LUMBERING INTEREST.

The vast pine forests cover the northern part of the State, extending from Lake Superior to the outlet of Red Lake, and extending as far south as latitude 46° in Anoka county. The principal pineries where lumber is obtained are situated upon the headwaters of the Upper Mississippi, and those of the St. Croix, Kettle, Snake, Rum, Crow Wing and Otter Tail rivers. The logs are cut in the dead of winter, and when the ground is covered with snow are conveyed to the streams, down which they are floated in the spring when the snow and ice melts. These pine forests being almost inexhaustible, constitute a vast source of wealth for generations to come. They give employment to a large number of lumbermen, who constitute a hardy class of industry as distinct as that of railroad or steamboatmen.

In 1861, the exports of lumber from this State were about 30,000,000 feet. This trade is constantly increasing; in 1865 upwards of 83,000,000 feet were manufactured at St. Anthony and St. Croix Falls, besides 15,500,000 shingles, and 16,500,000 laths. The products of 111,000,000 logs, of an aggregate value of $1,662,810 were exported. In 1866, the amount of logs and lumber cut and manufactured was about 175,000,000 feet.

MINERAL RESOURCES.

Copper and Iron.—The mineral deposits of Minnesota are another important source of wealth. In the northern part of the State copper and iron ore of superior quality are found. The copper mines are situated on the northern shore of Lake Superior, and are rich and extensive. Very pure specimens of copper ore have also been obtained from Stuart and Knife rivers. Thick deposits of iron ore are found on Portage and Pigeon rivers, said to be equal in tenacity and malleability to the best Swedish and Russia iron.

Coal.—Deposits of coal have been discovered on the Big Cottonwood river, a tributary of the Minnesota, and indications of it have been observed in other localities. A company has been formed to work the Cottonwood veins, and some geologists are confident that rich beds will yet be developed. We are not dependent upon this source, however; our proximity to the immense coal fields of Iowa, connected by railroads now under construction; and our own inexhaustible deposits of peat, proved by experiments referred to under the head of "Peat for fuel," to be almost equal to coal, will afford us for the future an ample and cheap supply of fuel for domestic and manufacturing purposes.

The Precious Metals.—"A geological survey, made under the auspices of the State in the summer of 1865, developed the existence of the precious metals on the shores of Vermilion Lake, 80 miles north of the head of Lake Superior. Scientific analysis attested the presence of gold and silver, in the quartz surface rock, in sufficient quantities to warrant the employment of labor and capital in their extraction, for which object a number of joint stock companies have been formed and a considerable number of enterprising persons provided with necessary appliances for mining, have repaired to that place in search of gold. There is good reason to believe the search will be successful."—*H. C. Rogers, Commissioner of Emigration.*

But the richest mines of wealth belonging to any State is a productive soil, and in this Minnesota is unequalled. There is a mine of gold on every farm of 160 acres, and it requires no capital to work it except industry.

Granite.—A fine bed of granite, equal to the best Quincy granite for building purposes, crops out at Sauk Rapids.

Limestone of fine quality for building purposes is found in many portions of the State, (in fact nearly all over it,) and affords ample material for the manufacture of lime.

Sandstone exists at Fort Snelling, Mendota, and other points in inexhaustible quantities. A fine white sand for the manufacture of flint glass abounds near St. Paul, said to be equal to any in the world. An extensive quarry of slate stone is found on the Saint Louis River, and probably exists at other points. A kind of *blue clay,* underlying the soil in a large part of the State makes brick of a good quality. White marl occurs in large beds at Minneapolis, St. Anthony and other places; it is used for pottery manufacturing, and also makes a hard durable brick similar to the famous "Milwaukee brick." In Wabashaw county a bed of the finest porcelain clay has been found.

Salt Springs.—Numerous very pure salt springs, yielding upwards of a bushel of salt to every twenty-four gallons of water, abound in the Red River valley The northwest, which consumes vast quantities of salt for pork and beef packing, and other purposes, will eventually be supplied from this source. The value of this source of wealth may be estimated from the fact that two million bushels are annually imported into Chicago alone, from New York and Pennsylvania.

Tripoli.—An inexhaustible bed of the purest Tripoli, requiring, according to

Prof. Shepard, no preparation to be fit at once for use and commerce, has been discovered near Stillwater. It is twenty feet thick and at least a half mile long.

"The use of Tripolis in the arts is very great. Wherever a high polish is required, whether upon metal, stone, glass, or even wood, their employment is perfectly indispensable, and in very considerable quantities. The consumption is constantly increasing; and the demand for the article is destined to know no limit."—*Report of Prof. Shepard.*

Tripoli is a deposit of the silicified remains of animalcules, and contains from 66 to 90 per cent. of silex; that discovered in Minnesota contains 77.7 per cent. of silex, the remainder being principally lime, iron, and alumina. As the known deposits of this earth are rather limited, and the imported article, in no way superior to that of Minnesota, commands from 25 to 30 cents per pound in New York, at wholesale, this discovery will increase in importance every year. A company for the purpose of mining Tripoli and preparing it for commerce is now in successful operation.

PEAT FOR FUEL.

In a northern country a ready and cheap supply of fuel is of the first importance. If any have imagined Minnesota to be a cold, timberless region, let them be at once undeceived. Our pineries are sufficient to supply the whole country with lumber, while throughout the State, the proportion of timbered lands and prairies is about what it should be to make it a good farming and stock growing country. Besides nature has made up whatever deficiency there may be of wood and coal with immense and inexhaustible deposits of *Peat*, a cheap and excellent *substitute for both*, for ordinary use and manufacturing purposes. Peat is a deposit of vegetable matter, principally from a kind of moss, which has collected for ages in fens and bogs. Vast beds of this material, from twenty to fifty feet deep exists all over the State, requiring only to be cut out in square lumps with a light spade and dried. It burns slowly, and gives off a great quantity of heat. It is identical with the "turf" taken from the peat bogs of Ireland and Scotland, and so extensively used in those countries. For ordinary heating and cooking purposes, it is simply cut out in brick-shaped pieces, of any size desired, and spread around to dry. When dried, it is carted and piled up under a shed so as to keep dry for use.

Peat is compressed by machinery lately invented for that purpose, until almost as solid as stonecoal and nearly equal to it for heating purposes, and superior to wood. Peat is now used instead of wood or coal on the Grand Trunk and Great Western Railroads of Canada. By a test of the heating properties of peat as compared with coal and wood made by the Boston and Worcester Railroad, in August, 1866, it was demonstrated that 3½ tons of peat at $4.50, per ton, worth $15.75, was equal to 4.41 cords of wood, worth $30.87 at $7 per cord, and to 2.95 tons coal, worth $29.50 at $10 per ton. A company was incorporated in St. Paul during the summer of 1866 for the manufacture of peat. They have brought on machinery for that purpose and are now in full blast on one of the large peat beds near the city. They assure us that they can furnish peat at $3 per ton, each ton being equal to 1¼ cords wood.

MINNESOTA AS A STOCK-GROWING STATE.

For raising cattle and horses, Minnesota is fully equal to Illinois; and for sheep growing it is far superior. According to established laws of nature cold climates require a large quantity and finer quality of wool or fur than warm ones, hence the fur and wool bearing animals are found in perfection only in northern regions. The thick coat of the sheep especially identifies it with a cold country; the excessive heat to which their wool subjects them in a warm climate generates disease. The fleece of Minnesota sheep is remarkably fine and heavy, and they are not subject to the *rot* and other diseases so disastrous to sheep in warm and moist localities. It is asserted by stock growers that sheep brought here while suffering with the rot speedily become healthy, and the same has been said of horses with heaves and shortness of breath. The sleek

and velvety appearance of horses here in summer time gives them the appearance of highly kept stallions. The cattle raised here are also remarkably healthy, the unanimous testimony of butchers being that they seldom meet with a diseased liver.

Our fine, rich upland meadows afford excellent facilities for grazing purposes; and hay in abundance for keeping stock during the winter may be had for the reaping. The characteristic perfection and nutritious qualities of the grasses in this State enables the farmer to keep his horses and cattle fat on it all winter without grain. The valleys and margins of the numerous streams and lakes, found on almost every farm, furnish an abundance of a coarser grass than that obtained from the upland meadows; this is generally fed to cattle, which are very fond of it both in its green and cured state.

Although the winters in Minnesota are apparently longer, the actual number of days during which stock has to be fed here is no more than in Ohio and southern Illinois.

Hogs also do extremely well here, and the abundance and certainty of the grain crop enables farmers to raise them as cheaply as elsewhere.

All stock requires shelter during the winter in this climate, but the necessity is no greater than in Indiana, Ohio and Illinois. The washing, chilling and debilitating winter rains of those States are far more injurious to out stock than our severest cold. All the shelter which stock requires here is that readily furnished by the immense straw piles which accumulate from the threshing of the annual grain crop. A frame-work of rails or poles is made, and the straw thrown over it, leaving the south side open. Under this cattle stand, feed on the straw in perfect security from the inclemencies of the severest winter.

SOCIAL STATUS.

The condition of society in all newly settled countries is a subject of interest to the settler. As a general thing the social status, in point of education, morals and refinement, is inferior to that of the older States. But in Minnesota, although outside the capital and its other principal cities we do not boast much *artificial refinement*, the morals of the community, as shown by our criminal statistics, are at least equal to those of the model States of New-England.

The society throughout the State is good; no prim and retired New-England village could outvie our young and thriving cities with their cleanly, decorous and whitewashed appearance. The population is composed mainly of American, Irish and Germans, but almost every nationality is represented. Most of the settlers are plain, honest, industrious farmers, attracted to our State by the salubrity of its climate, and the productiveness and cheapness of its lands. A large proportion of the population is made up of the best classes from the older States, North and South, who have come to reap the advantages of our fine climate, or to invest their means in property in our fine agricultural districts and in our rapidly growing towns, where immense fortunes have been realized by their rapid and solid growth.

We rarely see here any of that ruffianism and lawlessness which in most new States renders them unpleasant as a permanent residence. It would be as difficult to find a township without its "meeting house" and school house as in Ohio or Pennsylvania. The various religious denominations are proportioned among the population in about the same ratio as in the older States.

The following table, from the Bureau of Statistics, exhibits the ratio of crime in several States as compared with Minnesota:

State.	No. of Indictments.	No. of Convictions.	Ratio of Convictions.
Ohio, - -	3,571	1,234	1 in 1,950
Massachusetts, -	4,248	1,295	1 in 841
New-York, -	——	1,842	1 in 1,900
Minnesota, -	122	44	1 in 3,854

"The comparison is remarkably favorable to Minnesota, but might have been expected in a population chiefly agricultural."

EDUCATION AND SCHOOLS.

Minnesota took the subject of education in hand at an early stage of her settlement, and she may now justly boast of possessing the most munificent endowment for educational purposes of any State in the Union. Two sections of land, 1,280 acres, in every township, are set apart for sale or lease in aid of common schools, amounting in all to two and a half million acres.

The Superintendent of Public Instruction in his Report for 1864 says:

"The rapid increase of the current school fund accruing from the interest on the principal arising from the sales of school lands, forms a subject, as well of surprise as gratification. The balance in the treasury subject to distribution at the coming February apportionment is $27,999.28. Amount of interest on permanent fund for 1864, $38,640.00. Estimated receipts from other sources, $8,-360.72. Making a grand total for the fiscal year ending in December, 1864, of $75,000.00.

"The amount *per capita* at the last apportionment was 23 cents. At the ensuing apportionment it will amount to 45 cents at least, and during the fiscal year, to $1.15; and this, notwithstanding the fact that the number of persons reported between the ages of five and twenty-one years, exceeds that of last year by upwards of 14,000. Taking the number of scholars reported the current year as a basis of division, and the showing is $1.94⅓ to each, a sum which would maintain a respectable school three months in the year, *without additional aid*, paying in a school of 50 scholars a male teacher $32 per month, and in a school of 75 scholars, an additional female teacher $16.

"This exhibit springs from an experiment of but two years of sales, and involves the disposal of 90,440 acres of land only, being little more than one-fourteenth of the whole number of surveyed school lands in the State.

"Supposing the balance of these lands to be sold at the minimum price of $5 per acre, and we have a total, the interest on which at 7 per cent., (the legal interest in this State,) would produce an annual school fund of nearly half a million dollars. The lands unsurveyed are left out of the account."

In a communication published by the Auditor of State Nov. 21, 1866, he states that the permanent school fund of the State is now $1,348,862.55. No just conception, he says, can be formed of its ultimate extent. It is now over a million of dollars, and not much over one-twentieth of the lands have been disposed of. With the lands sold and unsold we have a school fund equivalent to twenty million dollars already.

Another land grant of 46,080 acres has been made for the endowment of a State University. It has been located at St. Anthony and a fine stone edifice erected for this purpose. Some pecuniary difficulties have formerly surrounded the Board of Regents, but I am credibly informed that they are now nearly settled, and the school will soon go into operation, affording facilities for every youth in the State *to obtain a free collegiate education.*

Private enterprise has also located many excellent private schools, classical and commercial, and seminaries in different portions of the State, thus affording educational facilities equal to those of the older States. The Baptists have a University at Hastings and the Methodists have one at Red Wing. The St. Paul Female Seminary at St. Paul, under the superintendence of Rev. J. G. Riheldaffer, and Bishop Seabury's Mission at Faribault, under the patronage of the Episcopalians, and embracing a preparatory and collegiate department, are all institutions of a high order of merit.

Bryant, Stratton & Pirkey's Commercial College at St. Paul is equal to any of the links in this great chain of business colleges, also a Commercial College at Minneapolis.

There is also an excellent State Normal School for the training of teachers in practical operation at Winona. In addition the State has a Congressional grant of 120,000 acres of land for the establishment of a first class Agricultural College, which is to be erected at Glencoe, and put in operation in a short time.

An excellent Female Seminary, under the auspices of the Catholics, and conducted by the "Sisters of St. Joseph," is in operation at St. Paul.

And a College will soon be opened at Northfield under the auspices of the Congregationalists.

CHARITABLE INSTITUTIONS.

Minnesota, although as yet too young to have a system of the noble public charities perfected, her wants in this line are provided for as soon as felt. An Asylum for the deaf, dumb and blind is in operation at Faribault; ample land grants have been made for the erection of an Insane Asylum, as well as for the support and education of the orphans of soldiers who fell in the late war. The Insane Asylum has been located at St. Peter, and is now in practical operation and ready for the reception of patients. The institution contains about forty patients at this time. There are two Orphan Asylums in St. Paul, one under the auspices of the Protestants, the other of the Catholics.

BANKS.

On the first Monday in October, 1866, there were fifteen National Banks doing business in the State, with an aggregate paid in capital of $1,650,000, and an aggregate circulation of $1,474,613, which is at a uniform par value throughout the United States, thus affording good and ample currency for the business purposes of the State.

RIVER TRADE—STEAMBOATS AND BARGES.

The steamboat business of Minnesota, is as yet confined to the Mississippi, the Minnesota and the St. Croix rivers. On the Mississippi the business is principally done by the "North Western Union Packet Company," the "Northern Line," and the "Savannah Packet Company," although a large number of independent or "wild" boats, as they are called, engage in our trade.

The North Western Union Packet Company, being a union of the "Davidson Line" and the Minnesota Packet Company, has within a few years grown to a large and influential company, starting, it is said with a "Line" consisting of *one* boat, they now own eleven first class packets, nineteen stern wheel steamers, together with one hundred and thirty-one barges, and employ over 2000 men. The capital stock of this company is $1,500,000. Their boats ply between Dubuque and St. Paul, and LaCrosse and St. Paul; two boats leaving St. Paul daily, connecting with the Ill. Central R.R. at Dubuque, Milwaukee R.R. at Prairie du Chien and LaCrosse. This line also has boats on the St. Croix, one boat daily to Taylor's Falls, and on the Minnesota a daily packet besides several freighters.

The Northern Line boats ply between St. Louis and St. Paul, and consist of nine first-class side-wheel packets, eight stern-wheel steamers, and sixty barges, —a boat leaving St. Louis and St. Paul daily. I am unable to give statements of the boats and arrangements of the Savannah Packet Company, plying between Savannah and St. Paul.

The Collector of Customs at the Port of St. Paul, gives the aggregate tonnage of that port for 1866, at 10,647.37 pounds, which falls far short of the actual amount, because of a large number of the boats being registered at Dubuque and Galena. Were the boats and barges plying to the Port of St. Paul all registered there, the tonnage would double the amount given above.

THE RAILROAD SYSTEM OF MINNESOTA.

In 1857, Congress made a land grant of four and a half million acres to Minnesota for railroad purposes. In 1864, an additional grant was made.

These acts grant ten sections, or 6,400 acres of land for each mile of road to be built under it, and projected the great lines which were intended to benefit all parts of the State, and provide for its increasing demands. These lines are as follows:

FIRST DIVISION ST. PAUL AND PACIFIC R. R. CO.

1st.—From Stillwater, via St. Paul and St. Anthony to a point on the western boundary of the State, near or at Big Stone Lake. This line passes through the

centre of the State, and extends from the eastern to the western boundary. It is about 220 miles long. From Stillwater to St. Paul the line is under the control of the St. Paul & Pacific R.R. Co., and no effort has yet been made to secure its construction. The distance is but 18 miles, and as the early completion of the road is demanded by the constantly increasing traffic between the St. Croix valley and the commercial centre of the State, it will not be long delayed.

From St. Paul to the western boundary of the State, this line is controlled by the First Division of the St. Paul & Pacific R.R. Co. The road has been located, and is completed and in operation from St. Paul to St. Anthony, ten miles. It has been graded to Lake Minnetonka, fifteen miles west of St. Anthony, and a large force is employed for the whole of this winter (1866–7) in pushing the construction of the line westward. An expensive bridge over the Mississippi river, just above the Falls of St. Anthony, is under contract to be finished by the middle of April, 1867. The iron for 60 miles has been purchased, and the company expects to complete the road that distance before the close of the year 1867.

2d.—A branch line from the road above mentioned, starting from St. Anthony, thence via St. Cloud and Crow Wing to Pembina, on the great Red River of the North, in Dacotah Territory, a distance of 400 miles.

From St. Anthony to Watab, 70 miles, this line is owned and controlled by the First Division of the St. Paul & Pacific R.R. Co. It is finished and in operation to St. Cloud, 76 miles from St. Paul, and will be completed to Watab during the year 1867.

ST. PAUL AND PACIFIC R. R. CO.

The balance of this branch line belongs to the St. Paul & Pacific R.R. Co. It has been located as far as Crow Wing, but is not as yet under construction.

3d.—A line from some point between St. Cloud and Crow Wing to Lake Superior, a distance of 120 miles. This line is controlled by the St. Paul & Pacific R.R. Co., and operations have not yet been commenced thereon.

THE MINNESOTA VALLEY R. R. CO.

4th.—A line from St. Paul up the Valley of the Minnesota river to Mankato, thence in a southwesterly direction to the Iowa State line; there to meet a road from Sioux City, Iowa, to the Minnesota State line. Sioux City is the northeastern terminus of a branch of the Central or Union Pacific Railroad.

The "Valley" road is under the control of the Minnesota Valley R.R. Co. The distance from St. Paul to the Iowa State line is 170 miles; from thence to Sioux City, 70 miles. The road is completed and in operation from St. Paul to Belle Plaine, 50 miles, and will be finished 40 miles farther to Mankato, during the year 1867.

THE MINNESOTA CENTRAL R. R. CO.

5th.—A line from St. Paul and Minneapolis, (junction at Mendota,) via Faribault and Owatonna to the north line of the State of Iowa. This line runs almost due north and south; it is controlled by the Minnesota Central R.R. Co.; it is about 110 miles long and is completed to Owatonna, about 70 miles, where it intersects the Winona & St. Peter R.R.

Arrangements are being made to complete this line during the year 1867, to a junction with the McGregor Western Railway of Iowa; thus giving us all-rail connection east and south via Prairie du Chien.

THE WINONA AND ST. PETER R. R. CO.

6th.—A line from Winona, via St. Peter, to the western boundary of the State.

This line runs east and west across the entire State; it is completed to Owatonna, 90 miles west of Winona, and will be finished to the Minnesota river, 140 miles, during the year 1867. The line, when completed, will be upwards of 250 miles long. It intersects the Minnesota Central at Owatonna.

THE SOUTHERN MINNESOTA R. R. CO.

7th.—A line from La Crescent up the valley of the Root River, through the counties of Houston, Fillmore, Mower, Freeborn, Faribault and Brown to the western boundary of the State.

This line is controlled by the Southern Minnesota R. R. Co., is completed to Rushford, Fillmore county, about 30 miles west of the Mississippi, and is being energetically pushed forward. It crosses the entire State, from east to west, through the southern tier of counties, and is upwards of 250 miles long.

HASTINGS AND RED RIVER R. R.

8th.—A line from Hastings, through the counties of Dakota, Scott, Carver, and McLeod to such point on the western boundary of the State as the Legislature may determine. This grant having been made during the past summer, the line has not yet passed into the control of a company. It is another east and west line across the State.

LAKE SUPERIOR AND MISSISSIPPI R. R. CO.

9th.—A line from St. Paul, which is the head of navigation on the Mississippi river, to the head of Lake Superior in Minnesota, with authority to connect with a branch to Superior City, Wisconsin. The distance to the navigable waters of Lake Superior is 133 miles; to the head of Lake Superior, 150 miles. This line is controlled by the Lake Superior and Mississippi R. R. Co. It has been graded about 30 miles from St. Paul, and will be pushed to completion the entire distance within three years, or before 1870. This road has also a grant of seven sections to the mile of State lands in addition to those named.

NORTHERN PACIFIC R. R. CO.

10th.—A line (not yet located) crossing the entire State from east to west, north of the 45° north latitude.

All the roads named have been endowed by Congress with land grants of ten sections, or 6,400 acres per mile, with the exception of the Northern Pacific, which has a grant of 20 sections, or 12,800 acres per mile.

ST. PAUL AND PACIFIC R. R., WINONA BRANCH.

11th.—In addition to the lines named above, the State has granted to the St. Paul and Pacific R. R. Co., the right to build a road along the valley of the Mississippi river from St. Paul to the southern boundary of the State, and has endowed it with a valuable grant of State lands amounting to 14 sections, or nearly 10,000 acres of land per mile. The line has been surveyed as far as Winona, a distance of 100 miles; ten miles of the grading has been completed, and the company are determined to build and equip the road with the least possible delay.

THE M'GREGOR AND WESTERN R. R.

Although not of our land grant roads, is one of much importance to a portion of our citizens. It is completed from McGregor out about 80 miles, and within 40 miles of Austin, Mower County, to which point it will be pushed rapidly as possible, there to connect with other roads.

SUMMARY.

It is impossible to overestimate the importance of this system of railroads to the present and future population of the State. The construction of these lines now in active progress gives employment to vast numbers of men, and gives assurance that every part of the State in the near future will enjoy the benefits of a cheap and speedy transportation of passengers and products to and fro. And when completed, the system will give to the whole State every advantage, so far as markets are concerned, which now belongs to the favored State of Illinois.

These lines, covering over 2,000 miles wholly within the limits of the State, are rapidly opening up some of the best lands in the world, by bringing them within easy reach of good markets. The different railroad companies are pursuing a liberal policy towards immigrants offering them inducements as to price and time payments, seeing that their own prosperity is identical with that of the State. St. Paul may be said to form the heart or centre of this net-work of the "arteries of trade."

The great facility which Minnesota possesses of sending her produce to market is not the least of her many advantages. The richest lands and the finest

climate in the world are useless in a commercial point of view if not connected with the great trading emporiums by wide and accessible channels of trade. The broad bosom of the Mississippi sweeps our commerce to the Gulf of Mexico, and brings back the cotton of the South to be manufactured by our numberless water-powers ; our railroads open another channel to the Atlantic coast ; while by way of lake navigation, via Lake Superior and the great Pacific Railroad, connecting us with both the Atlantic and Pacific, afford ample and unequalled commercial facilities.

Navigation on Lake Superior opens the last of April and closes about the 1st of December. In previous years propellers have left Buffalo as late as the 10th of December, in 1861 as late as the 21st.

"The navigation of Lake Superior, contrary to the general opinion, is much safer than that of the lower lakes. Its waters, being deeper, make easier seas, and it is navigable as many days in the year as any of them. * * * * It has been predicted by thinking men, who understand the subject, that when steam communication shall have been effected across the continent from the Pacific to the Atlantic, a change must take place in the courses of the commerce between the East and the West. When you can lay down in London and Hamburg cargoes of tea, silks, &c., from China, within fifty to sixty days after their shipment from there, then the old courses of trade by the way of the Cape of Good Hope will have to be abandoned—then the commercial sceptre will depart from England and pass into our keeping. This all seems as sure as anything in the future can be."—*Report of the Buffalo Board of Trade, for* 1866.

MANUFACTURING FACILITIES.

Extract from the 2d Report of J. A. Wheelock, State Commissioner of Statistics :—

"Apart from social causes and the general influence of the stimulating and exacting climates of the North, in developing the forms of skilled industry, it is owing chiefly to two physical circumstances that New-England has attained her present eminence in manufactures, in spite of her deficiency in the useful minerals and the raw material employed in the arts. These are, first, her abundant water power ; and, second, her favorable commercial position which has enabled her to obtain ready supplies of raw material from abroad and to distribute the product through a wide range of dependent markets. These circumstances alone among the physical conditions of manufacturing power, have raised the little State of Massachusetts, without internal resources of raw material, without coal or iron, to the first rank among American States in the manufacture especially of textile fabrics. And these purely physical conditions of industrial development exist in Minnesota in a greater degree than in New-England, and in addition she possesses to a large extent essential elements of raw material of which New-England is destitute.

"1. Minnesota possesses a more ample and effective water power than New-England. The falls and rapids of St. Anthony alone, with a total descent of 64 feet, affords an available hydraulic capacity, according to an experienced and competent engineer of 120,000 horse power. This is considerably greater than the whole motive power—steam and water—employed in textile manufactures in England in 1850, and nearly seven times as great as the water power so employed.

"That is to say, the available power created by this magnificient waterfall, is more than sufficient to drive all the 25,000,000 spindles and 4,000 mills of England and Scotland combined. The entire machinery of the English Manchester and the American Lowell, if they could be transplanted here, would scarcely press upon its immense hydraulic capabilities. But as compared with those great industrial centres, the Falls of St. Anthony possess one decisive advantage, which is to a great extent illustrative of the functions of the State as a commercial and manufacturing emporium, this splendid cataract forms the terminus of continuous navigation on the Mississippi ; and the same waters which lavish on the broken ledges of limestone a strength almost sufficient to weave the garments of the

world, may gather the products of its mills almost at their very doors and distribute them to every part of the great valley of the Mississippi.

"The St. Croix Falls, which are only second to St. Anthony Falls in hydraulic power, are similarly, though somewhat less advantageously situated at the head of navigation upon a tributary of the Mississippi. Except the Minnesota, nearly every tributary of the Mississippi, in its rapid and broken descent to the main stream, affords valuable mill sites. The Mississippi itself in its descent from its Itasca summit to Fort Snelling, in which it falls 836 feet, or over 16 inches per mile, is characterized by long steps of slack water, broken at long intervals by abrupt transitions in the character of the rocks which form its bed, and forming a fine series of falls and rapids available for hydraulic works. Pokegoma Falls, Little Falls, Sauk Rapids, and St. Anthony Falls, are the chief of these. But the Elk, Rum, St. Croix, and numberless smaller streams on the east slope of the Mississippi, the Sauk, Crow, Vermillion, Cannon, Zumbro, Minneiska, Root, and their branches, nearly all the tributaries of the Minnesota, and a multitude of streams besides, in their abrupt descent over broken beds of limestone or sandstone, through long and winding valleys or ravines, with a fall of from three to eight feet per mile, afford an unlimited abundance of available water power to nearly every county in the State. This diffusion of hydraulic power throughout the whole State, is a feature whose value as an element of development, can scarcely be over estimated, as it gives to every neighborhood the means of manufacturing its own flour and lumber, and affords the basis of all those numerous local manufactures which enter into the industrial economy of every northern community.

"2. Passing to the second point of comparison with New-England, already incidentally touched upon, the commercial position of Minnesota upon the termini of the three great water lines of the continent, not only gives it an immensely wider capacity of interior trade, but a far easier access to the sources of supply of raw material. A region six times as large as all New-England, as yet undeveloped, but already starting on the swift career of Western growth, and capable of supporting many millions of population, is directly dependent upon Minnesota for all the manufactured commodities it may consume. Its position relative to these Northwestern valleys, invests its manufacturing capabilities with an importance greater than those of any other of the interior districts of the continent. For the future manufacture of cotton and woolen fabrics, it has decided advantages of position over New-England. The Mississippi river brings it into intimate relations with the sources of the cotton supply, and it lies in the midst of the great wool zone of the continent."

The falls of the St. Louis river, at the point where the Lake Superior and Mississippi R. R. reaches the navigable waters of Lake Superior, said to furnish a manufacturing power equal to that of the falls of the Mississippi river at St. Anthony, must not be omitted from the above list.

Minnesota is evidently destined to become one of the greatest manufacturing States in the world, and already manufactories are springing up everywhere. There were five hundred and eleven establishments in 1860, with an aggregate capital of two and a half millions, producing annually four and a half million dollars worth of manufactures. The present number of establishments is estimated at two thousand, with a capital of ten millions.

Minnesota has the further advantage of possessing the raw material for a large class of manufactures,—copper, iron, wool, lumber, salt springs, sand for flint glass, &c., as already referred to, also coal and peat.

AGRICULTURAL CAPACITY—THE SOIL AND ITS PRODUCTS.

Not only are the manufacturing facilities of Minnesota equal to any in the world, but its agricultural capacities are unsurpassed by the finest agricultural districts of the old States. This combination of agriculture and manufacture is something very unusual; generally where one feature is present, the other is absent; but here, both features exist with all their advantages. Persons residing

in the Middle and Western States too often regard Minnesota as an inhospitable region, too cold for agricultural pursuits. But such will learn with surprise that few of the most productive districts in the world can compete with Minnesota.

Soils.—"The prevailing soil of Minnesota is a dark, calcareous, sandy loam, containing a various intermixture of clay, abounding in mineral salts and in organic ingredients, derived from the accumulation of decomposed vegetable matter for long ages of growth and decay. The sand, of which silica is the base, forms a large proportion of this, as of all good soils. It plays an important part in the economy of growth, and is an essential constituent in the organism of all cereals. About sixty-seven per cent. of the ash of the stems of wheat, corn, rye, barley, oats and sugar-cane, is pure silica, or flint. It is this which gives the glazed coating to the plants, and gives strength to the stalk.

"The superiority of sand in giving a high temperature to the soil, is a great advantage in a climate in which the limited period of vegetation requires the highest measures of heat."

This species of soil, on account of its penetrability to a great distance, by the roots of plants, enables them to gather nutriment at a greater distance from the stalk. It is porous, and permits free respiration of the soil,—as important to plants as animals. Owing to capilary attraction, it easily imbibes moisture from the air, and retains it a long time, enabling it to support vegetation during drouths, that in less favored localities prove disastrous to crops. The same quality prevents it from becoming supersaturated with water during wet seasons, on account of the facility with which it drains.

There is also this further advantage of sandy soils, that the roads are smooth and hard, easily made and kept in order, and are free from mire and mud, thus facilitating travel, hauling, &c., as well as farm labor generally.

"Another important feature of the soil of Minnesota is, that its earthy materials are minutely pulverized, and the soil is everywhere light, mellow and spongy, existing naturally in the condition reached in soils less favorably constituted, by expensive under-drainage. With these uniform characteristics, the soils of Minnesota are of different grades of fertility, according to local situations, or the character of the underlying rocks from which their elements have been derived. Distributed according to geological situations, the soils of the agricultural district of Minnesota may be divided into limestone soils, drift soils, clay soils, and trap soils."

Products of the Soil.—The following table shows the staple agricultural products of Minnesota, and about the *average* yield per acre :—

Crops.	Av. No. bushels per acre.	Crops.	Av. No. bushels per acre.
Wheat,	22.05	Sweet potatoes,	150.00
Rye,	21.56	Beans,	15.00
Barley,	33.23	Hemp lint, (pounds,)	1,140.00
Oats.	42.39	Flax lint, "	750.00
Buckwheat,	20.00	Sorghum, (gallons syrup)	100.00
Corn,	35.67	Hay, (tons)	2.12
Potatoes,	208.00		

The above table is compiled from the census of 1860, and various other sources, and gives only the *average* yield of the crops mentioned, and may be taken as a fair sample of the average for the State at large, one year with another. It must be understood, however, that on the prevailing soil of Minnesota, with manuring and careful cultivation, the actual yield is often nearly double the above figures. Potatoes, for instance, set down at 208, on good soil, and ordinary cultivation, will easily yield 300 bushels per acre ; wheat 35, corn 40, and other crops in proportion. In 1865, from 400,000 acres of wheat in Minnesota there was harvested the enormous crop of 10,000,000 bushels, being an average yield of 25 bushels to the acre. Nor was that year's crop considered anything extraordinary for our soil.

Wheat is one of the chief staples of agriculture in Minnesota, and is comparatively exempt from the dangers to which it is exposed in other States,—drouth,

rust, smut, insects, &c. The average percentage of the tilled area of the State in wheat is over 53 per cent., nearly double that of Ohio, which is 33, or Illinois, which is 28, from the fact that in those States the uncertainty of the crop, from the above causes, renders it unsafe to venture so large a proportion of the crop upon so precarious a product. In Minnesota the wheat crop is regarded as a sure and safe one, and rarely fails of a fine yield. The farmer sows with an assurance of reaping a good return, which he could feel in no other State, except perhaps Wisconsin and Northwestern Michigan, which belong to the same great wheat belt as Minnesota.

COMPARISON WITH OTHER STATES.

The wheat crop of Minnesota is not only more certain than that of Ohio, Illinois, Iowa, and other great wheat-growing States, but the yield is greater than the best of them. The average wheat-yield of Minnesota has been put down at 22 bushels to the acre ; in some counties, the yield was 25. The average wheat yield of the rich prairies of Illinois, owing to uncertainty of the crop perhaps, was stated as not over 8 *bushels* per acre, by Abraham Lincoln in an address before the Wisconsin State Fair of 1859. The average yield of Iowa is not over 12 bushels ; that of Ohio and Pennsylvania will not exceed 10. The average yield of Iowa in 1859, was 4. bushels ; that of Minnesota for the same year was 19. In 1850, the four States producing the largest average yield, were Massachusetts, Pennsylvania, Texas and Florida ; this did not exceed 15 bushels, while the other States averaged only from 5 to 12. The largest known yield of other States, as compared with the average of Minnesota, is as follows :

	Year.	Bush. per acre.		Year.	Bush. per acre.
Minnesota, - - -	1860	22	Michigan, - - -	1848	19
Ohio, - - - - -	1850	17.3	Massachusetts, - -	1849	16

In the face of these facts, we need have no hesitancy in pronouncing Minnesota the banner wheat State of the Union. Spring wheat is principally sown, but winter wheat does equally well, I believe.

Corn.—Many newspapers in States south of us have asserted that Minnesota is too cold for corn. But this is not so ; though not so much of a staple product as wheat, corn grows well in Minnesota, and the yield compares favorably with that of the best corn States. When stock, especially hogs, are raised to a greater extent than at present in the State, the corn crop must eventually become an important one to our farmers. The average corn yield of Minnesota in 1859, a bad year, was 26 bushels ; 1860, 35½ ; 1865, 43½ ; the average may be set down at 35 bushels per acre ; that of Ohio, Illinois and Kentucky at 20 ; that of Iowa, just south of us, 23. The average yield in 1859, was 26 bushels, 11 per cent. higher than that of Iowa for the same year.

"The following table will show how the corn yield of Minnesota in 1860 compares with that of other Northwestern and Middle States in the Census record of 1850 :

	Average yield per acre.		Average yield per acre.
Minnesota, - - -	35.67	Michigan, - - -	32
Ohio, - - - - -	36	Wisconsin, - - -	35
Indiana, - - -	33	Pennsylvania, - -	20
Illinois, - - - -	33	New York, - - -	27
Iowa, - - - -	32		

"These statistics establish beyond a cavil the fact, that while Minnesota is far ahead of any of these States in its capacity for wheat production, it is inferior to none of them as a corn State."—*2d Rep. Com. of Statistics.*

"This," adds the Report, "strikingly confirms the law already noticed, that the cultivated plants yield their greatest products near the northernmost limits of their respective growth."

Oats.—"The superiority of our climate and soil in the production of the cereals is nowhere more strikingly manifested than in the inferior classes of these grains." In 1859, the average yield of this crop was 33 bushels to the acre ;

in 1860, it was 42 ; in 1865, the yield was 51½ bushels. I have no means of comparing these results with the yield of other States, but doubt not but that the comparison would be as favorable as that of wheat and corn.

Rye, Barley and Buckwheat, like the other small grains, do exceedingly well in Minnesota. Mr. Wheelock in the valuable Report so often referred to says : "The climatic influences which give the wheat of Minnesota its recognized superiority of grain, are especially marked in the quality of our barley. This is beginning to be so generally recognized that it is already exported in considerable quantities to supply breweries in the Middle States." The average yield per acre of these grains for three years were as follows :

	1859.	1860.	1862.	1865.
Rye, - - - -	19.4	21.56	24.00	——
Barley, - - - -	29.1	33.23	34.00	37.50
Buckwheat, - - -	6.5	15.73	26.00	——

1859, it must be remembered, was a poor crop year, and the small yield of buckwheat for some years. is owing to the fact that it is generally sown on refuse land fit for nothing else.

Potatoes.—"The superior flavor and the rich farinaceous quality of the potatoes of Minnesota, afford an apt illustration of the principle maintained by Dr. Forry, that the cultivated plants come to perfection only near the northern limits of their growth. In the south, the potatoe, in common with other tuberous and bulbous plants, with beets, turnips, and other garden roots, is scarcely fit for human food. 'A forcing sun,' says Dr. Forry, 'brings the potatoe to fructification before the roots have had time to attain their proper size, or ripen into the qualities proper for nourishment.' Minnesota, at the West, reproduces the best northern samples of this delicious esculent, in characteristic perfection. From their farina and flavor the potatoes of Minnesota are already held in considerable esteem as a table delicacy in the States below us, and a market is rapidly growing up for them throughout the States of the Mississippi Valley, as is indicated by increasing exports."—*J. A. Wheelock.*

The potatoe crop of Minnesota is remarkably exempt from the *rot* which often affects that of States south of us. In the fall of 1864, a large proportion of the potatoes in the St. Louis and eastern markets were rotten hearted, while Minnesota potatoes were perfectly sound. The average yield of this crop in 1859, according to the assessors' returns was only 115 bushels to the acre ; in 1860, it was 138 ; and in 1865, 164 bushels. These figures must not be understood as giving a fair showing of the actual capacity of the soil, when it is known that the crops giving these results were simply plowed in, and overrun with grass, receiving no other attention than one or two plowings. When due attention is paid to cultivation, the yield will be from 300 to 400 bushels per acre. I have taken 50 bushels from a patch 70 feet square, which had been properly weeded with the hoe.

Sorghum.—But little attention has been paid to this crop in Minnesota. It is evidently adapted to a warmer climate, but planted early, on our rich soil, it will grow and produce equal to any place in the world. The average yield from very imperfect returns, has been set down at 72½ gallons ; but "some instances are reported where a product of 200 and even 300 gallons has been obtained from one acre," says Mr. Wheelock ; and there is no doubt but that the average yield may be safely estimated at from 100 to 150 gallons per acre.

Maple Sugar.—The sugar maple is found plentifully in the timbered part of the State. A product of 370,947 pounds of maple sugar, was reported for 1860.

Tobacco.—In 1862, 48,137 pounds of tobacco, averaging 1,140 pounds per acre, were raised in the State.

Hay.—Timothy and clover flourish in Minnesota ; in fact, white clover, red top, and blue grass seem indigenous to the soil, and speedily cover any land pastured much. The tame grasses are but little cultivated on this account ; the luxuriant growth of the native grasses which cover the "immense surface of natural meadow land formed by the alluvial bottoms of the intricate network of streams which every where intersect the country," and which "are as rich and

nutricious in this latitude as the best exotic varieties," render cultivation unnecessary. The average yield of these grasses is 2.12 tons per acre, 60 per cent. greater than that of the great hay State of Ohio, which, according to the Com. of Statistics of that State, is 1¼ tons per acre.

The lint plants, *Flax*, *Hemp*, *&c.*, as they come to perfection only in a cool climate, do extremely well in Minnesota. Their bark, in southern climates, is harsh and brittle, because the plant is forced into maturity so rapidly that the lint does not acquire either consistency or tenacity. Minnesota is equal for flax and hemp growth to Northern Europe. The yield of hemp lint in 1862, was 1,140 pounds per acre ; flax lint, 750 pounds per acre.

Onions, *Turnips*, *Parsnips*, *Carrots*, *Beets*, and nearly all bulbous plants, do equally as well as the potatoe.

Sweet Potatoes.—Our loamy, warm, sandy soil is just the thing for it, but our seasons are rather short ; planted early however, it yields a good crop. The average yield of sweet potatoes in 1862, was 150 bushels per acre.

Turnips, *Rutabagoes*, *and Beets* often attain a great size.

The Salad Plants.—Cabbages, lettuces, endive, celery, spinach—plants whose leaves only are eaten—are not only more tender here than in warm climates, where the relaxing sun lays open their very buds, and renders their leaves thin and tough, but are more nutricious, because their growth is slow and their juices well digested.

Melons, although they come in rather late, instead of throwing too much of their growth into the vine, as they do south, attain a large size, and a rich saccharine and aromatic flavor. This is especially true of the Cantelope melon, which in warmer climates has its sides baked or rots before it is fully matured.

Pumpkins, *Squash*, *&c.*, on the same principle, fully mature, and grow very fine and large. The Hubbard variety requires early planting, say first of May.

Beans, *Peas*, *&c.*, of every variety, are fine and prolific. Rhubarb, or Pie Plant, flourishes without cultivation.

Perhaps in no State in the Union does the soil so surely and amply reward labor, or yield larger products for the amount of labor bestowed on it. It is easily cleared of weeds, and once clean, its warm forcing nature enables the crop to speedily outstrip all noxious growths. Two good thorough workings usually insures a good growth of almost any cultivated crop.

FRUITS.

Apples, *&c.*—An impression seems to prevail abroad that we cannot raise fruit in Minnesota,—"an extraordinary inference," says Wheelock, "when we consider that many forms of wild fruit are indigenous to the country." Our climate is evidently not so well adapted to fruit-raising as that of some other States south of us. Still, sufficient of most kinds may be raised to supply the home demand. It has been demonstrated that many varieties of apples do well here, and there are now several bearing orchards in the vicinity of Minneapolis, Winona, St. Paul, Red Wing, Owatona, Rochester, Mankato, and other portions of the State. The specimens of Minnesota apples at the State fair of 1866, were equal in size and flavor to the same varieties elsewhere produced. It is not the severity of the winter that kills the tree, but the alternate thawing and freezing of the south side of the tree in the spring, which is avoided by mulching, and protecting the stem of the tree when young, by a wrapping of straw. The State being new, time sufficient for planting and acclimating orchards, has not elapsed; but there is no longer any doubt of our ability to raise fine apple orchards. Dwarf cherry and peach trees, which are easily protected in winter, do well, but the larger varieties are too tender. However, cherries may yet succeed, as the wild variety is a native of the soil. Apples grow well in Wisconsin, right along side of us; in Canada and New-England, north of us. The inference is clear that by procuring our trees *north of us*, (not south, as has heretofore been the practice) or planting the seeds and thus acclimating them, or by *grafting* on to the stock of the Siberian crab, which is remarkably healthy and hardy, and flourishes here through the coldest winters without protection, we may raise all the

apples we wish. There are several flourishing nurseries near Winona, Red Wing, St. Paul, Minneapolis, and other portions of the State.

Crab Apples.—The wild crab apple tree is indigenous to the soil, improves much by cultivation, and furnishes an excellent stock for grafting, but inferior to the *Siberian Crab,* which is equally hardy, and furnishes an excellent apple for preserving. Some varieties approach a hen's egg in size, and are quite palatable.

Strawberries.—Every variety of this excellent fruit does well here, attaining a size and flavor unsurpassed. Wild ones fill the woods and prairies every year.

Grapes.—The different varieties succeed well here, and several varieties of the wild grape vine grow luxuriantly all over the State. The cultivated varieties, while young, require to be laid down in the fall, and protected by a light covering of straw. The nature of our climate and soil would seem to designate Minnesota as a great grape-growing State. The juices of the grape, says Dr. Forry, are best matured for wine near the northern limit of their growth. On the Rhine, in Hungary, the sides of the Alps, and other elevated or northern situations, the vine is strongest, richest, and most esteemed. The grapes of France are more delicious for the table than those of Spain or Madeira, south of it. The excess of heat and moisture in the States south and east of us, blights the grape to such an extent that its culture has been abandoned. The vine, however, whether wild or cultivated, grows there luxuriantly. The vinous fermentation, as well as the pressing and distillation of the juice, can also be best conducted in a climate comparatively cool.

Gooseberries, Currants, and *Raspberries,* are cultivated extensively throughout the State, unsurpassed in flavor, size, and productiveness. They also grow wild, in common with *blueberries, whortleberries,* and both marsh and upright cranberries.

Wild plums, of a great many different varieties, some of them very large and fine, approximating the peach for domestic purposes, abound in the neighborhood of streams, lakes, and moist localities. They improve so much by being transplanted and cultivated as to equal any of the tame varieties. *Wild cherries* are also plenty.

From this list it is apparent that Minnesotians are not likely to suffer for the want of fruit. And it may be remarked of all fruits generally grown in Minnesota, that, owing to the principle announced by Dr. Forry, they attain a perfection found only at the northernmost limit of their growth. The pulp is delicate, saccharine, and of a rich flavor, while they are free from the larvæ, gum, knots, and acerbity of fruit grown further south. The dryness of the atmosphere, as well as the inherent perfection of the fruit, enables us to preserve it for a much longer time than can be done in warmer localities. Apples keep much better than in St. Louis or Cincinnati.

MINNESOTA AS A BEE COUNTRY.

This industrious insect thrives better in Minnesota than in regions south of us. Bees require a *clear, dry atmosphere,* and a rich harvest of flowers. If the air is damp, or the weather cloudy, they will not work so well. Another reason why they work less in a warm climate, is that the honey gathered remains too fluid for sealing a longer time; and if gathered faster than it thickens, it sours and spoils, Our clear bright skies, dry air, and rich flora, are well adapted to bee culture, and since the process of *burying bees during the winter* has been introduced by Bidwell Brothers, and adopted by the best apiarists, the length and coldness of our winters cease to be an obstacle. In fact, experience proves that bees succeed better here, consume less honey during winter, and the colony comes out stronger in the spring than in warmer localities. Bidwell Brothers' apiary, near St. Paul, contains four hundred colonies or hives. The annual surplus product of bees here averages from $10 to $20 per hive. Every Minnesota farmer, with a little care, can raise sufficient honey for his own wants, and have a surplus for market.

THE GROWING SEASON IN MINNESOTA.

In Minnesota, during the growing season, we find all those conditions most favorable to agriculture present in a marked degree. Its mean spring temperature is 45.6 degrees, which is the same as that of central Wisconsin, northern Illinois, northern Ohio, central and southern Pennsylvania and New Jersey, 2½ degrees south of it. Its summer temperature is 70.6 degrees, corresponding with that of middle Illinois and Ohio, southern Pennsylvania, Long Island and New Jersey, 5 degrees south of it.

The season of vegetation in Minnesota, in common with that of the upper belt of the temperate zone, is embraced between the first of April and the first of October. Some idea of the average temperature of this period may be obtained, by comparing it with the same period in other localities, whose agricultural capacities are well known:

	April.	May.	June.	July.	August.	Sept.
St. Paul, Minn. - -	46.3	59.0	68.4	73.4	70.1	58.9
Marietta, O., - - -	52.3	61.4	69.6	73.5	70.7	63.6
Chicago, Ill., - -	46.0	56.3	62.7	70.7	68.5	60.1
Boston, Mass., - -	45.57	57.04	65.57	71.08	69.10	62.78

It will be observed that the temperature of the growing months in the above places is so nearly the same, that the difference can be scarcely appreciable.* "The April of Minnesota is still the April of England, but her May corresponds in temperature with the English June."

The spring temperature of Ohio, it will be noticed, is greater than that of Minnesota, while its summer temperature is less. The coolness of the Minnesota spring, and the rapid increase in temperature as summer approaches, is claimed as a great advantage, and on this fact the perfection of its grains and other agricultural products in a great measure depends. The fact announced by Dr. Forrey, "that the cultivated plants yield the greatest products near the northernmost limits at which they will grow," is explained on the principle that the cool spring restrains the growth of the trunk and foliage of the plant, and throws the full development into the ripening period. "The very warm southern spring develops the juices of the plant too rapidly. They run into the stalk, blade, and leaf, to the neglect of the seed, and dry away before the fructification becomes complete. Our cooler springs reverse this process, restrain the undue luxuriance of the stem and leaf, and concentrate the juices in the development of the fruit and seed."

The cereals all attain their most perfect development in northern climates Potatoes and other cultivated roots follow the same law. The perfection and strength of the grasses in cool and northern regions, and their power of keeping horses and cattle fat without grain, is proverbial. Although the grasses attain sufficient size south, they are forced to a rapid fructification before they have time to elaborate their juices, and consequently contain but a small proportion of nutriment. These facts depend upon the same general law. At the same time, the products of grain, flour, &c., are manufactured to better advantage in a cold climate, as they are preserved from sourness, mustiness, &c., a longer time.†

Period of Exemption from Frost.—The period of total exemption from frost in Minnesota, varies from four to five and a half months, which allows ample time for the perfection of all the annual crops. The frost is general-

*"Minnesota, from its high northern position, has always had to maintain a certain struggle for a just appreciation against the ignorant preconceptions of the majority of people of our days, who were educated in the notion that latitude governs climate. It is difficult to make the New Hampshire farmer comprehend that St. Anthony Falls, in the latitude of Hanover, has the summer climate of Philadelphia—or that wheat, which will scarcely grow in northern New England, thrives on the 60th parallel, a thousand miles north of St. Paul. One of the most curious consequences of this abrupt northern deflection of the isothermal lines around the head of the great lake basins, is that St. Paul, in latitude 45, is very considerably warmer during the whole six months of the growing season, than Chicago, in latitude 42.

"It is not a little amusing, upon this showing, to read in the official report of the Illinois Central Company, and in the Chicago Democrat, that "every spring brings down the frost-bitten and chilled inhabitants of Minnesota, to the mild and genial clime of Illinois."—*Report of Commissioner of Statistics.*

†See an article on the "Acclimating Principle of Plants," in the American Journal of Geology, by Dr. Forry.

ly entirely out of the ground, which is then ready for planting, the last of April and first of May. The first fall of frost takes place with great regularity about the middle of September, though sometimes delayed till the middle of October. Minnesota is not exposed to late and early frosts more than the middle and western States. The peculiar *dryness of the air* also enables vegetation to resist light frosts, which in other localities would prove disastrous. This fact is exemplified by the frost of June 4th, 1859, which was general nearly all over the United States. In Ohio, Indiana, and Illinois, it was universally destructive; ice formed one-third inch thick in Ohio; but in Minnesota no damage whatever was done to field crops. On account of this dryness, the temperature may fall considerably below the freezing point at times, without producing frost. The dryness of the atmosphere, notwithstanding the abundance of the summer rains, is also very important on account of the protection it gives wheat and oats from rust, smut, and insects, which often seriously injure the wheat fields of moister climates.

Advantageous Distribution of Rain.—The mean annual fall of rain in Minnesota, as set down in Blodget's hyetal charts, is twenty-five inches. It is a remarkable fact that the greater part of this moisture is deposited during the six growing months, when it is most needed, instead of being wasted in deluging the land and making winter disagreeable, as in New England and the western and middle States. The following from the report of the Commissioner of Statistics, shows the contrast between Minnesota and the above States, in this respect:

	Minn.	Ills.	Pa.	Mass.
The six warm and growing months, -	19.55	26.30	20.94	23.15
The six cold and non-producing months, -	5.88	15.50	21.40	23.81
The three summer months, - -	11.00	13.20	11.93	10.71
The three winter months, - - -	1.92	7.10	10.76	11.85

"Now, all the points here brought into comparison have a greater rain fall in the whole growing season than Minnesota; but the summer fall is nearly the same, their superfluous spring and autumn rains, which are unnecessary and even injurious to vegetation, making up the difference in the whole quantity for the warm months."

The excessive autumnal rains in the above States are often very destructive to harvests. Immense amounts of wheat and corn were thus destroyed in Illinois in 1862. "The Minnesota farmer reaps as he sows, in the full confidence that no untimely tempest will defraud him of the fruits of his labors. In these wet climates, in the reeking summer air, agriculture is a perpetual vigil against concealed enemies."

CHEAPNESS OF OPENING FARMS.

It is a fact worthy of note, that in all places whose growth is unsubstantial, the price of land is disproportionately high, while its products are low. But in Minnesota, real estate is low, land is extremely cheap, (owing to the large surplus yet unoccupied,) while its products command the first prices. Wheat, oats, corn, potatoes, and in fact all that the farmer raises, find a ready market for cash at home. A curious illustration of the practical working of this principle is that lands purchased at ten dollars per acre *are paid for out of the proceeds of the first crop.* Take this instance: A gentleman having a farm for sale, offered it, with improvements, for $9 per acre. Failing to sell, he leased it, receiving one-third of the crop. His third netted him more than he would have realized from the sale of the land. Many such instances could be given. This illustrates what bargains may be secured where lands are cheap and the products of the soil high. A communication in the St. Paul Press, says: "It is our duty to let people read and learn of Minnesota, where a man can buy land, break and fence it, and pay for the land, breaking, fencing and all expenses, *out of the first crop!*"

A man with a small, but high priced farm in the old States can dispose of it for sufficient to set himself up well in Minnesota, and procure a farm for each of his children besides; and these farms in a few years will be as valuable as the one in the old State is now.

THE CLIMATE OF MINNESOTA.

UNPARALLELED HEALTHFULNESS—EXEMPTION FROM PULMONARY AND MALARIOUS DISEASES—CAUSES OF ITS SALUBRITY—DRYNESS AND PURITY OF THE AIR—TEMPERATURE AS COMPARED WITH OTHER STATES—AS A RESORT FOR INVALIDS, &C., &C.

BY A PHYSICIAN.

The assertion that the climate of Minnesota is one of the healthiest in the world, may be broadly and confidently made. It is sustained by the almost unanimous testimony of the thousands of invalids who have sought its pure and bracing air, and recovered from consumption and other diseases after they had been given up as hopeless by their home physicians ; it is sustained by the experience of its inhabitants for twenty years ; and it is sustained by the published statistics of mortality in the different States. The eminent Dr. Horace Bushnell, of Hartford, Conn., after spending a year in Cuba and another in California, without any permanent benefit, spent a year in Minnesota, and recovered. After returning East and submitting to a rigid examination, his physicians said : "You have had a difficulty in the right lung, but it is healed." In a published letter he says :—"I have known of very remarkable cases of recovery there which had seemed to be hopeless. One, of a gentleman who was carried ashore on a litter, and became a hearty, robust man. Another who told me he had even coughed up bits of his lung, of the size of a walnut, was then, seven or eight months after, a perfectly sound-looking, well-set man, with no cough at all. I fell in with somebody every few days who had come there and been restored ; and with multitudes of others whose disease had been arrested, so as to allow the prosecution of business, and whose lease of life, as they had no doubt, was much lengthened by their migration to that region of the country."

Many of our most prominent business men, whom no one would now take for invalids, belong to the above class. Almost any one who has resided here for any length of time can refer to numbers, now enjoying ordinary health, who on first coming here were considered hopelessly gone with consumption, or other chronic disease. It is believed consumption is never generated here, which is a strong proof that the climate is a favorable one for those afflicted with the disease.

Minnesota is entirely exempt from *malaria*, and consequently the numerous diseases known to arise from it, such as chills and fever, autumnal fevers, *ague cake* or enlarged spleen, enlargement of the liver, &c. Dropsy, diseases of the kidneys, affections of the eye, and various billious diseases, and derangements of the stomach and bowels, although sometimes arising from other causes, are often due wholly to malarious agency, and are only temporarily relieved by medicine, because the patient is constantly exposed to the malarious influence which generates them. Enlargement of the liver and spleen is very common in Southern and Southwestern States. We are not only free from those ailments, but by coming to Minnesota, often without any medical treatment at all, patients speedily recover from this class of diseases ; the miasmatic poison being soon eliminated from the system, and not being exposed to its farther inception, the functions of health are gradually resumed.

Diarrhea and dysentery are not so prevalent as in warmer latitudes, and are of a milder type. Pneumonia and typhoid fever are very seldom met with, and then merely as sporadic cases.

Diseases of an epidemic character never have been known to prevail here. "Even that dreadful scourge, diptheria, which, like a destroying angel, swept through portions of the country, leaving desolation in its train, passed us by with scarce a grave to mark its course. The diseases common to infancy and

childhood, partake of the same mild character, and seldom prove fatal." This is the language of Mrs. Colburn, an authoress, and the experience of physicians corroborates this opinion.

That dreadful scourge of the human family, the *cholera*, is alike unknown here. During the summer of 1866, while hundreds were daily cut down by this visitation in New York, Cincinnati, St. Louis, and other places, and it prevailed to an alarming extent in Chicago,—not a single case made its appearance in Minnesota.

Another, and a very large class of invalids, which derive great benefit from the climate of Minnesota, are those whose systems have become relaxed, debilitated, and broken down, by over-taxation of the mental and physical energies, dyspepsia, &c.

And these facts, establishing as they do the remarkable salubrity of our climate, are borne out by statistics. The following table is copied from the United States census of 1860. The percentage column exhibits the number of deaths in every 100 persons; the last column shows the number, in each State, out of which one person has died:

	Population.	Deaths.	Percentage.	One for every		Population.	Deaths.	Percentage.	One for every
Alabama,	964,201	12,760	1.32	75	Missouri,	1,182,012	17,557	1.48	67
Arkansas,	435,450	8,860	2.03	49	New Hampshire,	326,073	4,469	1.37	72
California,	379,994	3,705	.97	102	New Jersey,	672,035	7,525	1.11	89
Connecticut,	460,147	6,138	1.33	74	New York,	3,880,735	46,881	1.20	82
Delaware,	112,216	1,346	1.11	90	North Carolina,	992,622	12,607	1.27	78
Florida,	144,425	1,769	1.25	79	Ohio,	2,339,511	24,724	1.05	94
Georgia,	1,057,286	12,807	1.21	82	Oregon,	52,465	251	.47	209
Illinois,	1,711,951	19,263	1.12	88	Pennsylvania,	2,906,115	30,214	1.03	96
Iowa,	674,913	7,260	1.07	93	Rhode Island,	174,620	2,479	1.41	70
Indiana,	1,350,438	15,205	1.12	88	South Carolina,	703,708	9,745	1.38	72
Kansas,	107,206	1,443	1.34	74	Tennessee,	1,109,801	15,176	1.36	73
Kentucky,	1,155,684	16,467	1.44	70	Texas,	604,215	9,369	1 55	64
Louisiana,	708,002	12,329	1.74	57	Vermont,	315,098	3,355	1.06	93
Maine,	628,379	7,614	1.21	82	Virginia,	1,596,318	22,474	1 40	71
Maryland,	687,049	7,370	1.07	93	Wisconsin,	775,831	7,129	.92	108
Massachusetts,	1,231,063	21,804	1.73	57	Dist. of Columbia,	75,080	1,275	1.69	58
Michigan,	749,113	7,399	98	101	Nebraska,	28,841	381	1.32	75
Minnesota,	172,123	1,109	64	155	New Mexico,	93,516	1,305	1.39	71
Mississippi,	791,305	12,214	1.54	64	Utah,	40,273	374	.92	107

It will be observed that Minnesota has the smallest mortality of any State in the Union, except Oregon. Oregon, though a very healthy clime, is not a resort for invalids. Lying on the Pacific coast, its climate, like that of New England, is too humid to attract invalids. On the contrary, Minnesota is a great resort for consumptive invalids, and those laboring under various chronic diseases. Of course, some come too late, and die here—probably living a year or so longer than they would at home. This swells our mortality list, and taking it out, Minnesota would hold a higher place than even Oregon.

CAUSES OF THE HEALTHFULNESS OF MINNESOTA.

However interesting it might be to go into a scientific exposition of the causes and theories of the exemption of Minnesota from many of the diseases which annually carry off thousands in the older States of America and Europe, space will not permit, and I must confine myself to such facts as are already established beyond cavil or dispute.

Absence of Malaria.—A large proportion of the diseases which afflict mankind have their origin in the poisonous and unhealthy emanations which arise from the earth. These emanations embody a subtle principle termed *malaria*, which is constantly rising, like an imperceptible gas, poisoning the air, and generating disease, chills and fever, different kinds of fever, pneumonia, diarrhea, dysentery, debility, biliousness, diseases of the liver, spleen, kidneys, &c. The

low temperature of our winters, continuing as they do for four months, effectually destroys any malaria that might lurk in the soil, ready to spring forth in warm weather.

We are thus entirely free from malaria, and the fact is well established that *chills and fever*, and diseases generally, of a malarious origin, are entirely unknown in Minnesota, and those who come here suffering these ailments speedily recover.

Perturbation of the Air.—The atmosphere, like large bodies of water, requires perturbation to preserve its purity ; otherwise its becomes heavy and stagnant, loaded with impurities and unhealthy, depressing the spirits by its monotony, and inducing a torpid condition of the whole system. The waters of the ocean, and of large lakes, are kept pure by the agitation of the winds and tides. All healthy countries are windy, but all windy countries are not healthy. Winds blowing for many days in succession from one quarter, become pregnant with moisture and other impurities The winds in Minnesota are not persistent and severe, but constitute rather a lively agitation of the air, which constantly changes it, carrying off noxious vapors and effluvia, conducing to its clearness and purity, and imparting to it those qualities which give tone to the system and invigorate the nutritive functions.

The *prevailing direction* of our winds is from the south, according to observations, extending over twelve years, recorded in the U. S. Army meteorological register. "This fact," says Mr. Wheelock, "goes far towards accounting for the exceptional warmth of the spring and summer months in Minnesota, and serves to show that the direction of currents of air exerts an influence only less than the position in latitude in forming the measure of heat and cold." Our winds, instead of passing over the ocean, laden, like those dreaded "east winds" of New England and the Atlantic coast generally, with saline moisture, come to us only after traversing half a continent of land, pure and invigorating.

A comparison of the *mean force* of the wind for ten years, at different places, gives the following result : Fort Snelling, Minnesota, 1.87 ; New London, Connecticut 2.67 ; New York city, 2.96 ; Eastport, Maine, 2.63 ; Portsmouth, N. H., 2.50 ; Pittsburg, Pennsylvania, 2.20 ; Detroit, Michigan, 2.26 ; Fort Atkinson, Iowa, 2.48 ; Fort Leavenworth, Kansas, 2.09. We thus perceive that the mean *force* of the wind in Minnesota is less than at either of the other places, representing, as they do, all sections of the Union except the South, and confirms the statement previously made, that our winds are lively agitations of the air, rather than strong, continuous currents. As a consequence, the snows drift less than in the East, and usually lie without material disturbance.

The following table, from the report of the Commissioner of Statistics, gives a synopsis of the climate of Minnesota for the whole year, from which it will be seen that a more perfect harmony between the three great fundamental conditions of climate than is here displayed, could be found no where on earth :

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean Temp'ture—degs.	13.7	17.6	31.4	46.3	59.0	68.4	73.4	70.1	58.9	47.1	31.7	16.9
Rain—Inches, - - -	0.7	0.5	1.3	2.1	3 2	3.6	4.1	3.2	3.3	1.4	1.3	0.7
Prevailing Winds—	N.E.	N.W.	N.W.	N.W.	S.E.	S.E.	S.E.	S.E.	S.E.		N.	N.E.
Courses, - - - -	to	to	to	to	to	to	to	to	to	S.	to	to
	N.W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.W.		N.W.	N.W.

Dryness of the Air.—Another great cause of the salubrity of our climate is the marked *dryness* of the air. *Moisture* is a powerful agent in generating disease. It is the main vehicle of malaria and other atmospheric poisons. They cling to it, or it holds them in solution. It is through the watery vapor of the atmosphere that most morbific agents reach the human body. While an atmosphere which is *too dry*, like that of arid plains and sandy deserts, is unhealthy, engendering over-action, fever, and debility, that which contains an excess of moisture is still more so. A humid climate rapidly abstracts the natural warmth of the body, and lowers the vitality of the system, producing feeble action and poor nutrition as a consequence, thus rendering the system open to attacks of inflammations, colds, coughs and consumption, as well as neuralgic and rheumatic

affections. Cold, however intense, is not so perceptible if the air is *dry*. For example : wet one hand ; hold it and the dry one in the cold for a few minutes. A damp air penetrates and chills, drives the blood inwards, and shrinks and wrinkles up the skin. A cold, dry air, like ours, is tonic, exhilarating, and strengthening. It has not the feverish heat of the desert, nor yet the humid chilliness of the coast. This dryness further conduces to its *purity*. It is pure air, such as God intended to be breathed, oxygenating and purifying the blood, and exerting a tonic influence on the whole organism. It is free from the thousand and one impurities held in suspension by the excess of moisture prevalent in the wet climates of southern and western States, and in New England. It is full of electricity, and rich in the life-giving principle termed *ozone*, never found in impure air.

Temperature of Minnesota—*Compared with other States—Errors respecting our Winters—Secret of the Salubrity of our Climate.*—The popular impression that the further north you go the colder it gets, is an erroneous one. The rule is open to many exceptions. The configuration of the earth is such, that owing to mountain ranges, vast sandy plains, large inland bodies of water, &c., the isothermal, or heat lines, are deflected several degrees north or south, thus giving places a thousand miles apart the same temperature. Thus places in the same latitude of the Saskatchewan river, (latitude 51° N.) enjoy the same annual mean temperature as places in the latitude of Fort Union (latitude 37° N.) a thousand miles south of it. Minnesota, owing to the large lakes east and north of it, and the vast arid plains, extending from latitude 35° to latitude 47° west of it, enjoys a mean spring temperature of 45°, warmer than Chicago 2½° south of it, and equal to southern Michigan, central New York, and Massachusetts—a summer mean of 70°, equal to central New York, central Wisconsin, northern Pennsylvania, and northern Ohio, four degrees south of us—an autumnal mean of 45°, equal to New Hampshire, central Wisconsin and central Michigan, 2½° south of us—a winter mean of 16°, similar to northern Wisconsin, northern Michigan, central Vermont and New Hamphire, on the same line of latitude, but nearer the ocean; while its climate, for the entire year, being a mean of 45°, is similar to that of central Wisconsin, New Hampshire, and central New York, two degrees south of it. We thus have an annual range of temperature from the summer of southern Ohio to the winter of Montreal.

Referring to the above contrasts of climate, Mr. J. Disturnell, in a paper read before the American Geographical and Statistical Society of New York, says : "This remarkable fact can only be accounted for on the presumption that Minnesota receives its favorable climatic influence as regards health and growth of vegetation, from secret laws of nature, yet to be discovered."

But the veil which covers these natural laws is easily drawn aside. The luxuriant growth of her vegetation, large yields of cereals, &c., as we have seen, are accounted for by her warm, rich soil, forcing summer sun and timely rains, while the secret of the salubrity of her climate is found in the *dryness* and consequent *purity* of our atmosphere, combined with all the advantages of a rugged, delightful land, charming seasons, lovely and magnificent scenery.

That the dryness of our air is real, we have many evidences. Meat hung up, even in moderately warm weather, dries up before it spoils. Wagons, barrels, &c., if left idle a short time, drop to pieces. The hygrometer, an instrument for determining the moisture in the air, shows our air to be very dry, generally. The hyetal, or rain charts, in Blodget's "Climatology of the United States," shows the remarkable fact that Minnesota is the dryest State in the Union, and at the same time the best watered on account of its many lakes and streams, and free from drouths. Lying, as it does, between a vast arid belt on its west side, extending through twenty-five degrees, and a large humid belt of equal length on its east side, it enjoys a happy medium. The mean annual deposit of moisture in Minnesota is 25 inches ; Wisconsin 30 to 40 ; Iowa 25 to 42 ; Indiana, Illinois, Ohio, Missouri, 42 to 48 ; Kentucky, Tennessee, 50 ; Canada, 34 to 36 ; New England and New York, 32 to 45 ; Pennsylvania 36 ; Arkansas, Louisiana, Alabama and Mississippi, 55 to 63; Delaware, Maryland and Virginia, 40 to 42.

Errors respecting our Winters.—"No region which at present engages the public mind, as a field for settlement, has been so grossly misrepresented, in regard to peculiarities of climate, as Minnesota. Fabulous accounts of its arctic temperature, piercing winds, and accompanying snows of enormous depth, embellish the columns of the eastern press.—*Neill's History of Minnesota.*

We have seen that such impressions are erroneous—that our climate compares favorably in all respects with that of many other densely populated States. Disinterested authorities, that cannot be questioned, have set this matter at rest long since, and it only remains to enlighten the public respecting the truth. However repugnant to popular prejudice it may seem, our winter fall of snow and rain is only one-fifth that of New York and New England ; the average deposit of moisture in those places for the winter being ten inches—that of Minnesota two inches.—*See Blodget's Climatology, &c.," page* 342.

The great bulk of our water falls during the six growing months, in the form of refreshing showers, which cool the air and encourage vegetation, leaving our winters dry, crisp, and bracing—much easier to endure than the same amount of cold in a damp climate.

MINNESOTA AS A RESORT FOR INVALIDS.

Ever since consumption has been known, a *change of climate* has been recommended by physicians as a means of arresting a disease which medicine cannot cure. Until within the past few years, it has been customary to send consumptives to southern latitudes. But medical opinion, influenced no doubt, by the poor success attending this plan, has undergone a change, and as usual, gone from one extreme to another. Climates of a mild, equable temperature are no longer sought ; patients are now sent almost invariably to dry, cool, northern climates, where the air is subject to considerable perturbation.

There are many places which are, or have once been celebrated resorts for consumptive invalids—Madeira, Ventnor, Torquay, Cuba, Florida, Algiers, Upper Egypt, &c. Many of these are now known to be positively injurious to this class of patients, and have been abandoned. Among them all, there are very few, even if harmless, that possess any advantage. So unsatisfactory has been the result of change of climate that many eminent physicians no longer advise their patients to try it, believing that they stand about as good a chance to recover at home. The fact that the disease is quite common in all of these places of refuge, leads us to the conclusion that the benefit derived from them in such cases, if any, is due to the mere *change of climate* rather than to any special influence arising from the localities themselves.* The supposition that a warm climate, or even a cold one possessing an *equable temperature*, free from sudden changes, is required by consumptives, is evidently an erroneous one. Dr. Lawson, the author of one of the ablest works on this disease which has ever been published in any language, says : "In order to promote health, the atmosphere should be subject to some degree of perturbation, *and even rapid changes*, provided those variations are not great or extreme. The steppe of Kirghis, where consumption is almost unknown, is remarkable for its rapid changes, and even severe winds." Again : "In these early stages of phthisis, patients are already beginning to feel the depressing effects of disease, and therefore, require all those influences, hygienic and medicinal, which impart tone to the system, and thereby invigorate the nutritive functions. It cannot be presumed, however, that a mild and equable atmosphere will produce this result ; on the contrary, *the very monotony of the atmosphere must lead to depression*, and thereby increase the debility." Of warm climates, he says : "A very warm, stagnant and moist atmosphere, with but little elevation, would manifestly prove injurious, and there is sufficient ground to justify the conclusion that where the disease is far advanced, *tropical regions* are unfavorable." "We have abundant testimony to prove that when the disease has become established, and the system debilitated, but

* A Practical Treatise on Phthisis Pulmonalis," by L. M. Lawson, Cincinnati, 1861.

little good can be derived from warm regions, while, on the contrary, *great injury will often result.*" M. Rochard, another medical writer, refers to the fact that "tuberculosis marches with greater rapidity in the torrid zone than in Europe."

I have searched through a vast amount of medical authority, and digested numerous tables of statistics. The conclusion I arrive at is, that the only class of consumptives benefitted *at all* by warm, equable regions, are those in the very incipient stages; that the benefit in such cases is due more to the *change* than anything else; and that the same class of patients would be benefitted to a still greater degree by a dry, cool, elastic atmosphere, such as we have in Minnesota, and in parts of New Mexico and California.

Dr. Chas. A. Leas, United States consul at Madeira, who has resided in Russia, Sweden, Central America, and Madeira, in the service of the government, under date of September 10th, 1866, writes: "I have made the subject of climate, as a curative agent in consumption, a special study, and in connection with my annual report to the State Department at Washington—just now sent on—I have entered somewhat into detail upon that subject, and have endeavored to show, from observation, that consumption, in its earlier stages, is best relieved by a visit to, and residence of greater or less extent in, high northern latitudes, instead of warm climates, as is the usual custom. I have further suggested Minnesota *as one of the finest climates for that purpose.*"

In the report above alluded to, Dr. Leas accounts for the superior advantages of a high, dry, cool latitude, in tubercular diseases, on the theory that the lungs, in health, are only sufficiently capacious to "admit air enough to purify, through its oxygen, the whole of the blood; in proportion as the air thus breathed is contaminated, or mixed with moisture and other impurities, so will the amount of oxygen admitted into the lungs at any time, be diminished in quantity, and to the same extent, a portion of the vital fluid unoxygenized," giving rise to a diminished vitality, and thus laying the groundwork "for the development of consumption, under causes favorable to such a result." The atmosphere in high northern latitudes, is much purer than that of warm countries, on account of the precipitation of its excess of moisture by the cold, "thus giving a larger amount of oxygen, which is the great vivifying element in a given amount of air, and thus again enabling the lungs to more thoroughly purify the entire volume of blood. And more particularly are the lungs thus aided when a portion of their substance is thrown out of action from the actual deposition of tubercular matter. Besides all that, the frequence of such a large amount of pure atmosphere to the circulating fluid, has a decidedly tonic and invigorating effect upon that element, and through it the whole system. * * * * And for such an atmosphere as is here indicated, I would suggest to invalids affected with pulmonary disease, that they are most likely to find it in Minnesota."

The fact is worthy of note, that this communication comes from Madeira, an island which has been termed "the city of refuge" for consumptives. But the testimony of Dr. Mason, and the statistics of Dr. Renton, prove that it is only those in the very incipient stages that have been benefitted there. Of forty-seven confirmed consumptives who landed there, not one lived six months! And yet Madeira has the most equable climate in the world,—the temperature never varying over eleven degrees the year around,—never higher than 74 degrees, nor lower than 63 degrees. With a warm, baaltic soil, protection from winds, perennial summer, and tropical luxuriance, it would seem to be the consumptive's paradise; but such is not the case. The reason is simply that the air is too stagnant, and wants life and perturbation; and the air is too moist, experience proving that consumptives require an air sufficiently moist to prevent irritation of the air passages, but at the same time dry, elastic, pure, and invigorating. A little wind, therefore, does no harm, while the experience of ages has at length established the fact, beyond peradventure, that those countries most favorable to consumptives, as the steppe of Kirghis, New Mexico, Minnesota and California, are remarkable for the *dryness* and *purity* of their air, and are subject to occasional changes of temperature, as well as winds. Another fact

worthy of special mention is, that the disease is seldom ever generated in those countries.

As compared with the other places mentioned, Minnesota takes the palm from them all. While some portions of California, and of the Pacific coast generally, are favorable retreats, others are less so. The mountains are rather cold and harsh,—the valleys too stagnant and moist. The country about Sacramento and the interior of the State is the most favorable ; but even here, according to Dr. Hatch, of Sacramento, although the atmosphere is quite dry, it is very subject to abrupt changes, and extreme vicissitudes of temperature. The same is true of that portion of New Mexico and Texas, best adapted to consumptives—those fierce "northers," to which they are subject, often causing a change of temperature of 50 or 60 degrees in a few hours, and rendering winter clothing very acceptable. And yet Dr. Lawson says : "It is extremely probable, if not positively certain, that the territory known as New Mexico, embracing Santa Fe, is more favorable to consumptives than any point on the American continent, if not in the civilized world." Minnesota, at the time this was written, although even then a great resort for consumptives, had not become known to the slow Pegasus of the medical muse. Drs. Gregg and Hammond, in their accounts of the climate, show it to be very similar to, but inferior to that of Minnesota. It is dryer—rather too dry—increasing the bronchial irritation and dyspepsia, arising from inflammatory action of the mucous membrane of the stomach, and inflammation of the lungs. The climate is more changeable than ours, and subject to severer currents of wind. With these exceptions, the climate is very similar to ours. The air is dry and pure, and "persons withered almost to mummies are to be occasionally encountered, whose extraordinary age is only to be inferred from their recollection of certain notable events, which had taken place in times far remote."

Yet we have in Minnesota a climate superior as a resort for invalids, to even New Mexcico. We have never had any epidemic of typhoid or other fevers, but owing to its *warmer* climate (its yearly mean being 50° 6) New Mexico is somewhat subject to this class of disease. The typhoid fever raged there as an epidemic from 1837 to 1839. Our winds, instead of being strong, cold, and continued currents, constitute rather a lively agitation, or perturbation of the air ; and finally, Minnesota is as accessible by railroad and steamers as Chicago, while in New Mexico, Dr. Lawson says that "the difficulty of access, as well as the want of accommodations, and the character of the population, (Indians and hunters, or "rangers,") will, for a long period, deter even those who have sufficient physical ability, from visiting the country."

The conclusion is thus forcibly impressed upon us, that for invalids, as well as for every class of inhabitants required to populate a State, Minnesota is superior as a place of settlement to any region in the world.

Without asserting that all persons afflicted with pulmonary disease, will invariable recover in Minnesota, it may be safely claimed that no climate under heaven offers equal advantages to this class of invalids. While it is undoubtedly true that a larger percentage of those in the early stages of the disease will recover, there can be no doubt but that those in the second and third stages often get well here. No physician can foretell the result of a trial. The only method of deciding the question is by actual residence. There are those here, whom no one would take to be consumptives, who have had but *one lung for over ten years*. Many come too late, or coming in time, continue here the over-taxation of mind or body, or other unhealthy habits, which first broke them down. Their friends blame the climate, if they fail to recover ; but the fact is well established, that any case within the reach of climatic influence, will get well here, if anywhere. Another fact equally well established, is that a *permanent residence* here is better, in order to render the cure permanent. Many instances might be cited, where invalids, after spending a year or so here, and apparently got well, have gone East and died of the disease ; of others, experiencing a return of the old symptoms, and making a second recovery after returning to Minnesota. Many cases, however, are cured, or greatly benefitted, by a sojourn of a few

months. Sometimes years are required to effect a complete cure. It is better for all desiring to secure the benefits of our climate, to cut loose from all business relations where they reside, take up their abode, and go into business here, as a *resident* has much better chances of recovery than a *visitor*, who is deprived of *home comforts* and associations. Seasons vary, more or less, everywhere. Some are more favorable than others, but taken one year with another, Minnesota, as a *sanitarium*, will be found all that it is represented to be.

MINNESOTA SCENERY—RESORTS FOR TOURISTS.

The scenery of Minnesota has attracted the attention of many writers, painters and poets, and elicited eulogies in prose and verse, ever since the first white man stood on the brink of St. Anthony's Falls, or listened to the gleeful splashings of Minnehaha. The brilliant purity, dryness and elasticity of the air, bringing every object out with bold, distinct outlines, lends a peculiar charm to the lovely scenery which everywhere abounds. The nights, particularly, are serene and beautiful beyond description. Prof. Maury, author of the "Physical Geography of the Sea," says: "At the small hours of night, at dewy eve and early morn, I have looked out with wonder, love and admiration, upon the steel blue sky of Minnesota, set with diamonds and sparkling with brilliants of purest ray. Herschell has said, that in Europe, the astronomer might consider himself highly favored, if by watching the skies for one year, he shall, during that period, find, all told, *one hundred hours* suitable for satisfactory observation. A telescope mounted here, in this atmosphere, under the skies of Minnesota, *would have its powers increased many times* over what they would be, under canopies less brilliant and lovely," and many hundred such hours could be found here within that period.

The State is encircled by lakes and rivers, like the garden of Eden, as pictured by the imagination. In fact, the numerous streams and lakes of Minnesota, form one of its characteristic charms, and when it was the habitation of the Indians, they showed their appreciation of them by erecting their rude lodges on their shady, pebbly shores. The larger lakes, with outlets, are from one to thirty miles in diameter. The smaller class, however, are much more numerous, and "generally distinguished, also, for their clear, white, sandy shores, set in gentle, grassy slopes, or rimmed with walls of rock, their pebbly beaches sparkling with cornelians and agates, while the oak grove or the denser wood, which skirts its margin, completes the graceful and picturesque outline." Prof. Maury says: "There is in this territory a greater number of these lovely sheets of laughing water, than in all the country besides. They give variety and beauty to the landscape; they soften the air, and lend all their thousand charms and attractions to make this goodly land a lovely place of residence. We see that, with these beautiful sheets of water, nature has done for the upper Mississippi what Ellett proposes should be done by the government for the Ohio, and what Napoleon III is doing for the rivers of France."

These lakes all abound in fish, superior in flavor and quality to those of the sluggish streams of the Western States. Many leaping brooks, fed by springs, are pure and cold as mountains streams, and abound in speckled trout. To the disciples of Izak Walton, Minnesota is a perfect paradise. To one fond of the sport, nothing could be more delightful than to drive out to one of these lovely sheets of water, spending the heat of the day on their shady shores, and the morning and evening in a small boat, with rod and tackle. In the spring and fall these lakes are all covered with ducks and other water fowl, affording rare amusement for the sportsman.

So the tourist who seeks respite from hot pavements, brick walls, and sultry cities, relaxation of mind from the cares of business, recreation and recuperation, could take up his abode in no more favored spot. Unlike the cramped quarters, artificial enjoyments and tiresome excitement of fashionable places of resort, like Saratoga or Newport, where the heat, dust, and annoyance of city life, is found, without any of its comforts, here the broad fields of primitive nature opens

wide to view, and invites him to invade her precincts, invigorating body and mind.

From the first of May until the first of August, fishing is the principal sport. Sometimes wild pigeons, which often breed in our woods, may be shot in great numbers in June. After the first of August till frost, fowling commences, and the gun and dog take the place of hook and tackle. The first of August in Minnesota is what the first of September is in England, when the game law permits the shooting of prairie chickens, pheasants, grouse, &c., which abound everywhere. The larger game, such as deer, elk, and occasionally a bear or buffalo, come in with cold weather, and continue till spring. In the fall and spring, duck and geese are found plentifully in every little lake.

Not only to the mere sportsman does Minnesota offer superior attractions, but to the tourist generally, and all who would seek rest, natural repose, and quiet enjoyment, in a cool, bracing, and healthful climate, surrounded by all the pleasant associations of nature, "unmarred by the rude hand of art." Railroads and stage coaches may be taken, and the remotest parts of the State reached by easy or rapid stages, as may be preferred.

Every variety of scenery will be met with on these excursions; now rugged, bold, grand, and imposing; now lovely, beautiful, and picturesque. The peculiar properties of the air impart a softened brilliancy to the landscape, similar to what is seen under the skies of Italy. When clothed in the sylvan garments of summer, decked with the floral gems of a thousand fragrant prairies, and lighted by the gorgeous tints of its sunshine, or mellowed and softened by the dreamy haze of the "Indian summer" of the autumn months, nothing could surpass the scenery of Minnesota, diversified as it is with rock-ribbed hills and slumbering valleys, woodland and prairie, lofty and rugged bluffs, ravines, gorges, cataracts, cascades, eternal springs of limpid purity, and leaping streams which never dry.

THE END.

☞ The reader is referred to the second page of the cover for late official statements as to the School Fund, Amount of Logs and Lumber, Export of Wheat, Taxable Value of Property, Population, Rail Roads, Amount of State Debt, Reports from the State Land Officers, &c.

These could not be obtained in time for the body of the pamphlet, but will in the main be found consistent with the facts therein stated.

WINONA AND ST. PETER

RAILROAD COMPANY.

1867. 1867.

250,000 ACRES

OF THE

Finest Farming Lands in the Northwest

FOR SALE.

The Winona and St. Peter Railroad Company now offer for sale 250,000 acres of their lands, situated in the counties of Winona, Houston, Wabashaw, Olmsted, Freeborn, Mower, Dodge, Goodhue, Rice, Steele, Waseca, and LeSueur, and lying on each side of their railroad, extending from Winona, on the Mississippi river, westerly via St. Peter, across the southern portion of the State.

The lands were granted to the State by the act of Congress, approved 3d March, 1857, and subsequently conveyed by the State to this Company, in whom the title is now fully vested, free from any incumbrance whatsoever. They have been, until recently, withheld from sale for the past two years, and comprise some of the finest prairie, meadow and timber lands, to be found in the United States.

The tracts are located in the most densely populated portion of the State,—in many cases surrounded by large and highly improved farms, already offering to settlers advantages as regards schools, churches, markets, etc., equal to many of the Eastern States.

During the past year 2,500,000 bushels of wheat have been carried over the Winona and St. Peter Railroad—the products of the farms lying along the line of, and adjacent to, the road—the yield having been for several years past from twenty-five to forty bushels per acre, proving the soil to be exceedingly fertile, and admirably adapted to the production of wheat.

The attention of all is invited—the industrious poor man, who desires a home for himself and family, where the land is annually rapidly increasing in value, as well as the capitalist, who desires to engage extensively in farming or stock raising,—as the lands are offered in tracts of forty acres and upwards, for cash, or on long time, at a low price per acre, and low interest.

Maps showing the exact location of the lands can be seen at this office, and pamphlets relating to the lands, soil, climate, productions of the State, will be furnished, as well as any desired information, on application being made in person at the office of the Land Department, or by letter, to

H. W. LAMBERTON,
Land Commissioner Winona and St. Peter R. R. Co.,
Winona, Minnesota.

Milwaukee and Prairie du Chien

AND

McGREGOR WESTERN RAILWAYS

THE DIRECT ROUTE FROM

Milwaukee and Chicago to Whitewater, Madison, Prairie du Chien, McGregor, Ossian, Connover, Decorah, and Cresco, and all points in South-Western Wisconsin, and Northern and Central portions of Iowa.

CONNECTIONS.

AT MILWAUKEE.—Chicago and Milwaukee, Detroit and Milwaukee, and Milwaukee and St. Paul Railways, and Propeller Lines on Lakes.

AT MILTON JUNCTION.—Chicago and Northwestern Railway.

PRAIRIE DU CHIEN.—Northwestern Union Packet Line for St. Paul and intermediate points.

During the year 1867, the McGregor Western and Minnesota Central Railways will be completed to their junction, thus forming a

DIRECT ALL-RAIL LINE

From Milwaukee and Chicago to St. Paul & Minneapolis,

Through the richest portions of Wisconsin, Iowa and Minnesota.

CONNECTIONS MADE AT JANESVILLE,

For Beloit, Rockford, Freeport, Galena, Dubuque, &c.

BAGGAGE CHECKED THROUGH.

Magnificent Sleeping Cars on Night Trains.

PURCHASE TICKETS via MILWAUKEE.

A. V. H. CARPENTER,
General Passenger Agent.

S. S. MERRILL,
General Manager.

Milwaukee and Saint Paul Railway

AND CONNECTIONS.

The Shortest, Best, and Most Expeditious Route to the Northwest.

CONNECTING WITH THIS ROAD ARE,

AT MILWAUKEE—The "Milwaukee Division" of the Chicago and Northwestern Railway—formerly Chicago and Milwaukee Railway, in Union Depot; the Detroit and Milwaukee Railroad and Steamship Line—and the Propeller Lines on the Lakes, also land near the Depot.

THIS ROAD CONNECTS WITH,

AT WATERTOWN JUNCTION—Chicago and Northwestern Railway, for Fond du Lac, Oshkosh and Green Bay.

AT LA CROSSE—Steamers in Summer and Stages in Winter, running in direct connection with Winona and St. Peter and Minnesota Central Railways, from Winona to St. Paul, Minneapolis, and all interior points; also with the

FINE LINE OF STEAMERS

Of Northwestern Union Packet Company, for St. Paul and intermediate river points.

Purchase Tickets via Milwaukee and La Crosse,

THE SHORT LINE.

BAGGAGE CHECKED THROUGH.

MAGNIFICENT SLEEPING CARS ON NIGHT TRAINS.

A. V. H. CARPENTER,
General Passenger Agent.

S. S. MERRILL,
General Manager.

1867. 1867.

THE

Minnesota Valley

RAIL ROAD COMPANY,

Saint Paul, - - Minnesota,

FROM ST. PAUL, via MANKATO, TO SIOUX CITY.
COMPLETED TO BELLE PLAINE—48 MILES.

A Land Grant of 1,200,000 Acres.

The Company now offer for sale and settlement 350,000 acres of their lands, comprising some of the very finest and most productive farming land in the West, at prices from $5 to $10 per acre.

These lands were odd sections, withdrawn from sale in 1857, the even sections being mostly sold to actual settlers. The country is consequently well settled and improved, with roads, school houses, churches, and numerous towns and villages.

The lands consist of both timber and prairie, with rich soil and finely watered, with a climate superior to that of any of the Western States.

The lands now offered are situate in the counties of Dakota, Hennepin, Carver, Scott, Sibley, LeSueur, McLeod, Nicollet, Blue Earth, Brown, Watonwan, Martin, and Cottonwood.

GENERAL TERMS OF SALE:

One-fifth cash, balance in five annual payments, with interest at the rate of 7 per cent. per annum, or a discount of 10 per cent. on four-fifths of purchase money for cash sales.

All applications for the purchase of lands, or any information regarding them, may be addressed to the

"LAND DEPARTMENT,"
Minnesota Valley Railroad Company, St. Paul.

OFFICERS OF THE COMPANY:

E. F. Drake, *President.* | G. A. Hamilton, *Secretary.*
J. L. Merriam, *Vice Pres't.* | H. Thompson, *Treasurer.*

1867. THE 1867.

North Western Union Packet Co.

The splendid steamers of this Company will run during the season of navigation, between St. Paul and Dubuque, forming a daily line, and making close connections at

Dunleith,	with trains of	Illinois Central R. R.
Dubuque,	"	Dubuque Sioux City R. R.
Pr. du Chien & McGregor,	"	Mil. & Prairie du Chien & McGregor W. Railways.
LaCrosse,	"	Mil. & St. Paul R. W.
Winona,	"	Winona & St. Peter R. W.
St. Paul,	"	St. Paul & Pacific R. R. Minnesota Valley R. R. Minnesota Central R. R.

These steamers are unsurpassed by any on the Upper Mississippi, for *speed*, *safety*, *and comfort*. They are elegantly fitted for the accommodation of passengers, and are commanded by experienced Captains.

The traveler or tourist on this route sees the many young cities and villages that have grown up, as if by magic, along the shores of the Mississippi river, from Dubuque to St. Paul, among which are McGregor, Prairie du Chien, LaCrosse, La-Crescent, Winona, Wabashaw, Lake City, Red Wing, Prescott, Hastings, &c. He also passes through *Lake Pepin*, a beautiful sheet of water, thirty miles in length, embellished on either side with grand and interesting scenery. Indeed, all along the river are found spectacles of a very romantic and picturesque character, unequaled in the new world, if indeed in the old. The art-embellished shores of the Hudson do not compare with the grand, wild, natural scenery, with which nature has festooned the shores of the Father of Waters in Minnesota ; and cultivated travelers from abroad, have again and again asserted, that there is nothing in the old world to equal it—not even in Italy, Switzerland, or the Rhine,—mid the vine-clad hills of old France !

Passengers can purchase through tickets to all principal points East and South, at the offices of the Company. Westward bound passengers can also procure tickets over this route, at all Eastern Railroad offices.

W. F. DAVIDSON, President.

St. Paul, Minnesota—Office corner of Jackson Street and Levee.

Lake Superior & Mississippi
RAILROAD.

The line of this road is from St. Paul, the head of navigation on the Mississippi river, to the head of Lake Superior, a distance of 140 miles. It connects at St. Paul, with each of the long lines of railroad traversing the vast and fertile regions of Minnesota, in all directions, and converging at St. Paul.

It connects the commerce and business of the Mississippi and Minnesota rivers, the California Central Railroad, and the Northern Pacific Railroad, with Lake Superior and the commercial system of the great lakes, and makes the outlet or commercial track to the lakes, over which must pass the commerce of a region of country, second to none on the American continent, in capacity to furnish all the items of trade and commerce that will go to make up a vast business for this road.

The land grant made by the government of the United States and by the State of Minnesota, in aid of the construction of this road, is the largest in quantity and most valuable in kind, ever made in aid of any railway in either of the American States.

This grant amounts to seventeen square miles or sections (10,880 acres) of land for each mile of the road, and in the aggregate to *one million six hundred and thirty-two thousand acres of land.*

These lands are for the most part well timbered with pine, butternut, white oak, sugar maple, and other valuable timber, and are perhaps better adapted to the raising of stock, winter wheat, corn, oats, and most kinds of agricultural products, than any equal quantity of land in the Northwest.

These lands are well watered with running streams and innumerable lakes, and within the limits of the land belonging to the Company, there is an abundance of water-power for manufacturing purposes.

A glance at the map, and an intelligent comprehension of the course of trade, and way to the markets of the eastern cities and to Europe, for the products of this section of the Northwest, will at once satisfy any one who examines the question, that the lands of this Company, by reason of the low freights at which their products reach market, have a value—independent of that which arises from their superior quality—which can hardly be over-estimated.

Twenty cents saved in sending a bushel of wheat to market, adds $4 to the yearly product of an acre of wheat land, and what is true of this will apply to all other articles of farm produce transported to market, and demonstrates that the value of lands depends largely on the price at which their products can be carried to market.

THE LANDS OF THIS COMPANY

ARE NOW OFFERED TO

IMMIGRANTS AND SETTLERS

At the most favorable rates, as to time and terms of payment.

W. L. BANNING,

President.

1867.

MINNESOTA CENTRAL RAILWAY.

This Land Grant Railroad starts from Minneapolis and St. Paul, (junction at Mendota) and is now completed to Owatonna, over seventy miles, where it intersects the Winona and St. Peter Railroad. The "Central" will be pushed forward with energy to Austin, Mower county, and to connections with the "McGregor and Western" Railroad, "Cedar Valley" Railroad, and the Southern Minnesota Railroad. The Minnesota Central Road passes through the most delightful and productive portion of the State, traversing the wealthy counties of Hennepin, Dakota, Rice, Steele, Dodge, and Mower. The tourist, by this route, passes by the renowned "*Falls of Minnehaha*," "Glorious old Fort Snelling," the immense bridges that span the Minnesota river, where it meets the Mississippi, within full view, at the same time, of Mendota, Fort Snelling, and the three young cities of St. Paul, St. Anthony, and Minneapolis. But it is reserved to the tourist, in harvest time, to behold a spectacle worth all these, *when he becomes a "living witness" to the wealth of grain with which Minnesota soil rewards the husbandman!*

SELAH CHAMBERLAIN, President.

D. C. SHEPARD, General Superintendent.

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1867. THE

SOUTHERN MINNESOTA

Rail Road Company.

T. B. STODDARD, - - - - *President.*
C. D. SHERWOOD, - - *Vice President.*
LUKE MILLER, - - - - *Treasurer.*
C. G. WYCKOFF, - - - - *Secretary.*
B. D. SPRAGUE, - - *Land Commissioner.*

This road starts at LaCrescent, and is now completed to Rushford, and work on it will be pushed forward vigorously towards its terminus.

Being a Land Grant Road, this Company is endowed with a wealth of land not surpassed by any Road in the State. Passing, as it does, through the wealthy and populous counties of Houston, Fillmore, Mower, Freeborn, Faribault, Martin, and Brown, it traverses the rich valley of Root river, thence through a region of unsurpassed fertility, to the western line of the State.

The Company now offer for sale

40,000 ACRES OF LAND

at from **$3 to $8 per Acre,** upon long time, at reasonable interest.

Much of this land is of excellent quality,—some prairie and some well wooded—all of it in a region traversed by never-failing streams of pure water,—in the midst of settled neighborhoods and districts, rapidly filling up with an active and intelligent population. The fine water power of Root river is being developed, and will add greatly to the wealth, population, and importance of this portion of the State.